A SOCIOCULTURAL PERSPECTIVE ON IMPROVING THE READING COMPREHENSION SKILLS OF 9th GRADE SOCIAL STUDIES STUDENTS

by
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Abstract

Now, more than ever, high school graduates need the skills required to read and comprehend information adequately across various content areas. However, secondary teachers in the United States have difficulty implementing literacy instruction in their classrooms. This quasi-experimental mixed methods study of freshman social studies teachers and their students at a small, suburban New England high school examined outcomes from teachers' participation in a literacy-focused professional development program and an ensuing community of practice. Seven teachers engaged in approximately 21 hours of professional development over five and a half weeks (27 days) as well as ongoing discussions with their community of practice and instructional coach. Teacher participants completed a *demographic survey*, *professional development scale*, and *reach and dose received survey* three times during the seven-day professional development experience. Professional Development activities included PowerPoint presentations, articles, videos, role plays, discussions, and lesson planning sessions, as well as applicable classroom assignments during and after each professional development session. Teacher participants implemented the Reciprocal Teaching intervention with students during the remaining 4 weeks (20 days) of the study. Teacher participants completed the *Teacher Self efficacy of Literacy Instruction* survey and the *Literacy Instruction Beliefs and Competencies Survey* prior to and following the intervention. Each teacher also participated in a postintervention interview, and field notes and other artifacts were collected to document the professional development and classroom implementation experience. Students completed the *Adolescent Motivation to Read Profile* and a *reading comprehension test* prior to and following the intervention. A comparison of preintervention and postintervention teacher data with Mann-Whitney U tests revealed statistically significant growth in teachers' instructional self efficacy,

instructional beliefs, and perceived ability to implement the Reciprocal Teaching intervention correctly. In follow-up *interviews*, teachers identified the support of their instructional coach and colleagues as key elements in their successful implementation of Reciprocal Teaching. Results of paired sample *t* tests revealed statistically significant growth in students' reading comprehension and motivation to read scores. Follow-up discussion with students after posttest completion revealed they used some or all of the Reciprocal Teaching strategies learned during their participation in the intervention. Students also stated they felt more equipped to read and comprehend text postintervention.

Keywords: high school, teachers, social studies, professional development, communities of practice, reading comprehension, literacy, Reciprocal Teaching, motivation

Dissertation Advisor: Dr. Stephen J. Pape

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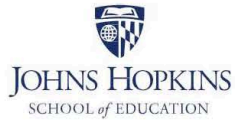

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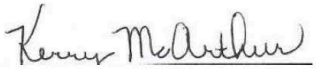
Kerry McArthur		5/28/20
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Dedication

This dissertation is dedicated to my grandmother, Charlotte DiAntonio, for encouraging me when I was 19 years old to get my doctorate. Without her love, guidance, and support in life, and in death, I would not have achieved this milestone.

This dissertation is dedicated to my parents, James and Helen Handfield. I am a first-generation college student. I am the first in my family (on either side) to earn a Bachelor's degree, Master's degree, Certificate of Advanced Graduate Study, or Doctoral degree. I have earned all four. Thank you, Mom and Dad, for always wanting better for me, Corey, and Chris.

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Finally, this dissertation is dedicated to my best friend, Becca Rudolph. If I did not have you to lean on through this process, I may not have finished. Thank you for being a constant source of love and support every day.

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This dissertation tells the story of a journey taken in a small, suburban, New England college preparatory high school to increase students' reading achievement and motivation to read through providing high quality professional development to teachers in order to improve the teaching and learning process. Early in this dissertation process I began to understand I was experiencing my own high-quality professional development at Johns Hopkins University, supported and propelled forward by my Hopkins family, friends, and high school community.

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Executive Summary

Today's students are leaving high school facing a complex and everchanging world. Students' preparedness to participate in a constantly shifting economy, both domestically and abroad, requires agility and the ability to employ a multitude of skillsets needed for occupations they will hold in their lifetimes (Marx, 2014). Most commonly referred to as 21st Century skills (Partnership for 21st Century Skills, 2005), these skillsets include (a) employing interpersonal and intrapersonal skills, (b) utilizing technology in various contexts, (c) solving problems in a creative manner, (d) communicating effectively in written and spoken English, (e) collaborating constructively with others in the workplace and in society, and (f) reading for understanding across various settings (Marx, 2014). However, the ability to read for understanding is the foundation upon which all other skill development rests. Students' reading achievement at the secondary level has been stagnant for almost 40 years (McQuillan, 1998; Wexler, 2018). With the creation of the Common Core State Standards for English (National Governors Association Center for Best Practices, & Council of Chief State School Officers, 2010) adolescent literacy has become a focal point for policy makers, researchers, and educators across the United States.

The present quasi-experimental mixed methods study investigated how participation in a multi-day professional development (PD) experience, with community of practice (CoP) and instructional coach support, might facilitate the improvement of teachers' instructional self efficacy, instructional competency, and integration of literacy skills in freshman social studies classrooms. This study also examined the effect of reciprocal teaching (RT) instruction on students' reading comprehension and motivation

to read social studies text.

Bronfenbrenner's (1976) ecological systems theory (EST) provided the theoretical foundation to identify and explore factors associated with the issue of stagnant reading achievement identified at the research site for this study. Examining the issue of students' chronic reading underachievement through the EST lens provides readers an opportunity to understand how the interconnectedness of the five systems comprising a person's environment influences their motivation to read and ability to comprehend text.

A needs assessment study was conducted to investigate factors that influenced the development and use of reading comprehension skills in 9th grade classrooms. The participants included 16 teachers and 23 students. Teachers and students completed two survey instruments. Teachers reported that students were motivated to read when teachers were enthusiastic about text(s), although students reported they were motivated to read when they were provided choice in reading materials. Students also reported they were more likely to read if preparing for socialized instructional activities, such as discussion groups, literature circles, and book clubs.

Based on the needs assessment study findings, social constructivist theory was identified as the theoretical framework to support the PD intervention, with emphasis on a form of social constructivist theory known as sociocultural theory (Vygotsky, 1978). Sociocultural theory posits that learning happens by pairing an individual's independently constructed knowledge with relevant social experiences as well as cultural activities and tools (ranging from symbol systems to artifacts to language) to form new understandings (Palinscar & Brown, 1988). PD programs can have a positive impact on teachers' integration of literacy skills in the secondary classroom when providers use socialized

instructional practices as part of their programs.

Specific elements of high-leverage PD highlighted in this study include interactive, on-going, job-embedded professional learning opportunities that directly related to teachers' work in classrooms through the creation of a CoP, which have been the focus of research on effective PD (Leiberman & Wood, 2002a). Lave's (1988) Situated Learning Theory states that learning is a product of social interactions between people within various contexts. These social interactions can affirm and/or alter people's current perceptions of knowledge and beliefs to create common understandings (Kobett, 2016; Brown, Collins, & Daguid, 1989). Situated Learning Theory served as the theoretical framework for the CoP in this study. CoP that are well-planned, recurring, and inclusive of ongoing implementation support educators to develop instructional knowledge, skills, and confidence that positively impacts student achievement (Borko, 2004; Desimone & Pak, 2016; Fuller, Hodkinson, Hodkinson, & Unwin, 2013; Lave, 1988; Lave & Wenger, 1991; Wenger-Treyner & Wenger-Treyner, 2015). The following research questions guided this study:

RQ1: What was the delivered PD and to what extent was it implemented with fidelity?

RQ2: What were the teachers' experiences related to completing RT PD?

RQ3: What were teachers' experiences related to implementing RT in their classrooms?

RQ4: What were the participants' instructional self efficacy, instructional beliefs, and perceived ability to implementing literacy instruction within social studies instruction following the intervention?

RQ5: How did students use the four components of RT in groups after the teacher implementation period?

RQ6: What were the effects of RT on students' reading comprehension and motivation to read social studies text?

A mixed methods explanatory sequential design was employed to investigate these research questions, with emphasis on a variant of the explanatory sequential design known as a follow-up explanatory explanations model. In this model, "the researcher places the priority on the quantitative phase and uses the subsequent qualitative phase to help explain the quantitative results" (Creswell & Plano Clark, 2011, p. 85). The rationale for this selection included triangulation of data through convergence and corroboration, complementarity through elaboration upon findings, initiation ability to potentially reframe research questions, and expansion of the research breadth through both methods (Johnson & Onwuegbuzie, 2004).

Seven teachers engaged in approximately 21 hours of PD over five and a half weeks (27 days) and engaged in ongoing discussion with a CoP and instructional coach. Formal classroom PD was completed over seven days and involved a variety of activities (i.e., PowerPoint presentations, articles, videos, role play, discussion, and lesson planning) as well as applicable classroom assignments during and after each PD session. Teachers implemented the RT intervention with students during the remaining 4 weeks (20 days) of the study. Data were collected and analyzed simultaneously following the mixed methods explanatory sequential design model. The statistical analyses included descriptive statistics, Mann-Whitney U tests, and paired sample *t* tests. Qualitative data were analyzed using a thematic coding hybrid approach that included both inductive and

deductive coding. Quantitative and qualitative data were analyzed separately and then merged to allow for triangulation of findings.

Overall, teachers shared positive views of their PD experiences. There was strong agreement among teachers regarding their understanding of each session, the usefulness of presented material, and their ability to apply information in their classrooms. Teachers enjoyed working together and having each other as a resource through the process. During the classroom implementation phase, teachers introduced RT and implemented each step appropriately with students. Teachers repeatedly praised the work of the instructional coach and referenced her positive influence on their ability to implement RT appropriately in their classrooms. A majority of students practiced each step of RT correctly as demonstrated by their teachers at the outset of the of the intervention.

Teachers' self efficacy related to providing literacy instruction to students significantly increased from preintervention to postintervention. This is noteworthy as teachers' preintervention scores demonstrated a slightly negative perception of their ability to provide literacy instruction, compared to the dramatic increases in their reported self efficacy at the end of the intervention. The increase in scores were supported by teachers' statements regarding the positive nature of their PD experiences. Further, teachers' perceived abilities to teach literacy skills in their classrooms increased significantly at the conclusion of the intervention period. Teachers' statements indicated having an instructional coach available to provide assistance and feedback was invaluable to the positive changes reported at the end of the intervention period.

Finally, students' reading comprehension scores showed significant improvement preintervention to postintervention. Students' statements at the end of the RT intervention

indicated they did not use a specific approach to read or retain information when completing the pretests. At the conclusion of the intervention period, however, students indicated they used some or all of the RT steps practiced during the intervention period to read and retain information on the posttest. Students' motivation to read also significantly improved preintervention to postintervention.

Chapter One

Overview and Factors Related to Problem of Practice

Literacy attainment for adolescents in the United States has remained stagnant since the 1970s (McQuillan, 1998; Wexler, 2018). Society, however, has evolved over the past 40 years into a fast-paced, constantly changing, technological world that has given rise to an increased need for a highly-skilled, literate workforce. The development of a literate workforce is vital to the continued social, civic, and economic advancement of the United States in the 21st Century (Shanahan & Shanahan, 2008). Yet, a large percentage of students graduating from American high schools today do not possess the requisite literacy skills needed to meet the demands awaiting them in higher education and the workforce.

One concern related to developing a literate workforce in the 21st Century is the belief that reading instruction is the sole responsibility of elementary teachers (Raudenbush, 2018). If students are to meet the increased social, civic, and economic needs of today's constantly evolving world, teachers in America's secondary schools must take responsibility for literacy instruction within their respective content areas (Shanahan & Shanahan, 2012). Presently, the lack of attention given to formal reading instruction in high schools coupled with content teachers' generalized approaches to reading has resulted in a critical shortage of literate workers in the United States (Marx, 2014). This is not surprising as a review of National Assessment of Educational Progress (NAEP) scores from 2015 showed only 37% of twelfth-grade students graduated high school with proficient or higher reading skills (National Center for Education Statistics, 2015).

Because there is a shortage of workers who possess the ability to read, analyze, and critique text at a high level in the United States, political, business, and educational leaders have opened dialogue with teachers regarding critical literacy competencies students should possess upon graduation from high school (Porter, 2013). Of specific importance is how to develop workers who possess the reading comprehension skills necessary to effectively meet the literacy needs in various occupational fields to stay competitive domestically and abroad (Martella-Marchand, Martella, Modderman, Pan, & Petersen, 2013; Moje, 2010). Despite efforts at the national and state levels to improve students' reading comprehension skills, there has been little progress over the past 40 years (NCES, 2015). It is widely accepted that high-quality classroom instruction is the most powerful means to develop students' reading comprehension skills at any grade level, but parent, home, socioeconomic, teacher, and instructional factors within the K – 12 setting are serving as impediments to this instruction (Caskey & Anfara, 2014).

Problem of Practice

The Problem of Practice (POP) for this study focuses on the improvement of students' reading comprehension skills at the end of their 9th grade year at a small suburban, middle-class, New England high school. Despite attempts to produce improvements in reading comprehension scores within this high school since 2014, test scores remain stagnant at this high school in the same manner as reading comprehension scores on the state and national levels (NCES, 2015).

The rationale for focusing on reading comprehension performance in 9th grade is grounded in research suggesting the academic performance of 9th grade students is a valid indicator of future success in high school and beyond (Willens, 2013). It is believed

that adolescents' reading comprehension struggles begin at the start of high school (or earlier) due to subpar reading comprehension skills (Biancarosa & Snow, 2006). One of the primary drivers of 9th grade students' success is the ability to meet the reading demands of the "Freshman Year Experience" (FYE) course curriculum, in addition to the 9th grade content area curriculum. To meet the reading demands of the FYE course curriculum and 9th grade content area curriculum, students need age-appropriate reading comprehension skills.

This chapter provides an overview of the POP for this study. The context of the study is a high school that is academically strong and works with parents and students to place 100% of its graduating classes in college, technical, or occupational settings. First, an introduction to the POP and the context will be provided. Second, Bronfenbrenner's ecological systems theory (1979) will be introduced as the theoretical framework for the POP of this study. Third, parent, home, socioeconomic, instructional, and teacher factors that emerged from the research literature believed to influence the lack of improved reading comprehension achievement will be examined.

Context of Problem – A Small Suburban New England High School

For the present study the setting for this POP is a small suburban, middle-class, New England high school that serves approximately 720 students in grades 9-12. The school year is divided into three trimesters that are 13 weeks in length. Within this setting 9th grade students participate in a yearlong transition course known as FYE. The course was implemented at the start of the 2013-14 academic year by the principal, who is also the researcher of the present study. The rationale for creating the FYE course was a result of research focused on the importance of student success in 9th grade and the

implications for future success or failure in high school and beyond (Abbott & Fisher, 2012; Dedmond, 2005; Nield, 2009).

In addition to being the principal of this high school, the researcher has a strong connection to this community. He graduated from this high school 26 years ago, resides in the same town as this high school, and has two children, two nieces, and a nephew who attend this high school. The researcher has been the principal of this high school for 15 years and will become the superintendent July 1, 2020. Turnover is rare among the faculty. Of the 63 faculty members employed at this school, 54 have been teaching here for at least 15 years. Several faculty members also reside in the community. The faculty is a dynamic group of educators committed to improving their instructional practice within and across departments. Although the researcher served as the catalyst for the FYE course, many faculty willingly participated in its design and implementation.

One aspect of the FYE course that focuses on helping all students meet with success throughout their 9th grade year is the opportunity for students to learn important skills to assist them in meeting the social, civic, and economic demands that await them in a fast-paced, 21st Century environment. As described by the Partnership for 21st Century Skills (2005), students are introduced to learning environments within FYE and their core content courses that seek to develop their competencies in: (a) life and career skills; (b) learning and innovation skills; (c) information, media, and technology skills; and (d) reading, writing, and arithmetic skills. These competencies are woven into students' English, social studies, mathematics, science, physical education, and health classes, as appropriate.

A concentrated area of focus across the FYE and core content area curriculum

includes the advancement of students' reading comprehension skills. It is the administrations' and 9th grade faculty's perception that students who cannot read for comprehension at grade-level or beyond after their 9th grade year struggle to master content area material and skills as they move forward in high school and beyond. This perception is supported within the research literature (Dedmond, 2005; Willens, 2013). Students are exposed to a variety of reading materials in each of their courses, including textbooks, primary source documents, novels, word problems, and scientific articles of varying length.

After each trimester, the 9th grade faculty reviews students' building based reading comprehension assessments in English, social studies, mathematics, science, physical education, and health. Teachers in each content area chart students' scores on a scale ranging from 0 to 4. The reading comprehension assessments and scoring rubric mirror the reading comprehension portions of the state's academic proficiency examinations, which are administered annually by the state's Department of Elementary and Secondary Education in English, mathematics, and science in 3rd-10th grades. The state requires students in 10th grade receive a passing score on the English, mathematics, and science examinations to receive their high school diplomas. Students must also satisfactorily complete their local school district's program of study requirements set forth by the local school committee.

A comparison of students' content area scores on pretest and posttest assessments in 2017, 2018, and 2019 demonstrate no change. The scores for each year have been 2.3 (2017), 2.3 (2018), and 2.2 (2019). These stagnant scoring patterns are consistent with stagnant outcomes on the open-response portions of the state performance examination,

and students' performance on national tests such as the Scholastic Aptitude Test and NAEP exams (Mulhare, 2014; NCES, 2015). When 9th grade teachers were asked about the potential causes for this stagnant scoring pattern, the most common answer received was, "these kids cannot read." Pushed further to elaborate on their statements, teachers reported students are not motivated to read content area material. Furthermore, teachers reported feeling it was not their role to teach students reading comprehension skills or elicit student motivation to complete readings in their content areas. They further identified limited knowledge and understanding of the reading process and ways to effectively implement reading comprehension and motivational strategies within their classrooms with students. Conversations with teachers during formal and informal visits to their classrooms and subsequent conferences revealed that some of them recall brief coverage of content area reading and motivational practices in a course or two during their preservice teacher preparation programs, but nothing beyond. Teachers who received their teaching certification through alternative pathways reported no exposure to coursework related to content area reading or motivational practices. Their certifications were granted by the state's Department of Elementary and Secondary Education after receiving passing scores on content knowledge and basic literacy exams in their respective subject areas.

Although there is not a proficiency examination in place for social studies at this time, updated curriculum frameworks in social studies were adopted by the state's Department of Elementary and Secondary Education in 2018. Implementation of these revised frameworks is expected to start in high schools during the 2020-2021 school year. Changes to the state's social studies curriculum frameworks includes the sequence of

courses students must complete, the implementation of new concepts and skills, and the creation of a student capstone project to demonstrate their Civics knowledge prior to receiving their diplomas.

Currently, students take World History in grade 9, United States History I in grade 10, and United States History II in grade 11. Students may take Civics and Financial Literacy in grade 12, although it is not required. Beginning in 2020-2021, students will complete United States History I in grade 9, United States History II in grade 10, and World History in grade 11. Civics and Financial Literacy courses are now required in grade 12. In addition, there is significant emphasis on student engagement in the updated social studies frameworks. Trainings on student engagement and active learning has been taking place across all departments this year. This focused approach to teaching and learning is a stark contrast from the passive approaches witnessed during many classroom visits over the past several years. Instead of the chapter by chapter, section by section, linear approach teachers and students are accustomed to in social studies, the creation of thematic, interdisciplinary units of study are underway that rely on a variety of hands-on activities similar to what is found in the "History, Alive!" series (Teachers Curriculum Institute, 2015).

Currently, the lack of teachers' preparedness to teach literacy in their content areas is problematic. There is widespread agreement among many within the educational community that teachers across the K-12 continuum need to assume responsibility for the instruction of reading comprehension in their content areas (Shanahan, 2012). This belief is partly due to the increasingly complex nature of texts that students encounter as they advance in grade levels, coupled with the increased literacy skills students need to be

successful in the 21st century after high school (Moje, 2010; National Governors Association Center for Best Practices, Council of Chief State School Officers, 2010; National Reading Panel, 2000a; Pardo, 2004; Rasinski, 2003; Woolley, 2011). Not focusing on the development of content area reading skills throughout a student's K-12 educational experience places students at risk of being under prepared to meet the demands of postsecondary educational opportunities and the needs of a rapidly changing globalized economy. Ninth-grade teachers at this small suburban, middle-class, New England high school need the knowledge and skills to develop grade appropriate reading comprehension skills with their students.

By viewing the POP in this study through Bronfenbrenner's (1976) Ecological Systems Theory (EST), an opportunity emerged to examine the more prominent factors of the POP of this current study in more depth. The use of EST to frame the factors for this study's POP provided an opportunity to understand the various environmental influences that impact a child's literacy development from birth through high school (Demi, Coleman-Jensen, & Snyder, 2010).

Ecological Systems Theory

Bronfenbrenner's (1979) EST framework is a conceptual model suggesting a child's cognitive, social, and emotional growth over time occurs within an environment comprised of four nested and interrelated ecological systems: (a) the microsystem, (b) the mesosystem, (c) the exosystem, and (d) the macrosystem (Ashiabi & O'Neal, 2008; Bronfenbrenner, 1976). The closest of the four ecological systems to a child is his or her microsystem. A child's microsystem is the immediate environment in which he or she lives and contains the most prominent individuals he or she interacts with in his or her

daily life. Examples of individuals within a child's microsystem include his or her family unit, peer groups, and teachers. At the microsystem level important reciprocal relationships exist between the child and the individuals with whom they will interact resulting in changes to each other's behaviors and beliefs (Ashiabi & O'Neal, 2008).

Residing outside a child's microsystem is their mesosystem. This second layer of EST connects the different relationships a child has with individuals in his or her microsystem together for the sake of the child. The interactions between a child and individuals in his or her environment is only considered a meaningful interaction when individuals in the child's environment involve themselves in aspects of the child's everyday life. For example, parental involvement in a child's schooling can have a positive influence on his or her achievement through his or her learned appreciation for academics (Ashiabi & O'Neal, 2008).

The third layer of EST is a child's exosystem. This ecosystem captures events that impact the individuals within a child's microsystem. While there may not be a direct impact on the child due to his or her lack of functioning membership in this layer of EST, he or she may be impacted in an indirect manner. An example of an event occurring within a child's exosystem that may indirectly impact him or her could be a parent losing a job and how that influences parental interaction with their child (Ashiabi & O'Neal, 2008).

The most distant ecosystem from a child according to EST is his or her macrosystem. A child's macrosystem involves the society in which he or she lives, and the cultural values and economic conditions that comprise a child's family life (Bronfenbrenner, 1976). Material resources and opportunity structures also exist within a

child's macrosystem (Ashiabi & O'Neal, 2008). The interrelated nature of these separate, but connected ecosystems, provides a framework for understanding how a child develops his or her cognitive, social, and emotional skills over time. For the purposes of this study, discussion will now turn to examining the development of reading comprehension from an EST perspective (Ashiabi & O'Neal, 2008; Bronfenbrenner, 1979).

Understanding Reading Comprehension Development through EST

As discussed in the previous section, a review of EST thus far revealed a child's cognitive, social, and emotional development is directly and indirectly influenced by four interrelated ecosystems that comprise a child's environment. Discussion in this section explores the more prevalent factors revealed in the literature that contribute to a child's reading comprehension development from an ecological systems perspective. These factors include: (a) parents, (b) home environment, (c) socioeconomic status (SES), (d) instructional factors, and (e) teacher beliefs. Through this discussion, a more complete understanding of what could be impacting students' reading comprehension achievement across the country, as well as this small suburban, middle-class New England high school will be gained.

A broad investigation of factors that impact student achievement in schools began with the seminal work of James Coleman. His published report *Equality of Educational Opportunity* (Coleman et al., 1966) offered the suggestion that the experiences a child has within his or her family unit has more influence on his or her academic achievement than school resources alone. Specifically, three factors were identified by Coleman as having a significant impact on a student's academic achievement: (a) household composition, (b) SES, and (c) parents' level of education. Research conducted during the last 50 years

demonstrates Coleman's findings still have relevance today in different areas of academic achievement, including reading comprehension (Jackson & Moffit, 2017). Within the context of children acquiring reading comprehension skills, parental involvement, home environment, and family SES play an important role in school and reading preparedness.

The Impact of Parents, Home, and Socioeconomic Status

A child's reading comprehension development begins with the actions of parents in his or her home environment prior to entering elementary school. Beginning in infancy research findings suggest that the skills and knowledge required for the development of reading preparedness is enriched across the period of early childhood by exposure to spoken language, printed materials, and opportunities for exploratory and informal instructional encounters with different types of literacy materials (Philips & Lonigan, 2009). The frequency of a child's exposure to these skills is critically important as oral language, phonological awareness, and print knowledge combine to create the strength of a child's early literacy foundation (Philips & Lonigan, 2009). However, the amount of exposure a child has to early literacy skills is highly dependent upon his or her parents' educational attainment, how often his or her parents read themselves and to them, and the availability of reading materials in his or her home (Van Bergen, Zuijen, Bishop, & Jong, 2016). In addition, there is also a strong correlation between the adequacy of a child's core literacy skills and visiting libraries, being encouraged to read, parental support with word identification, and the modeling of literacy behaviors by parents and other capable readers in a child's environment (Levy, Gong, Hessels, Evans, & Jared, 2006). Significant exposure to these experiences increases the likelihood that a child will enter school possessing the knowledge and skills necessary to become proficient readers.

While the aforementioned literacy experiences mentioned should be something all parents provide for their children, this is not always the case. As noted by Philips and Lonigan (2009), variability in early literacy development exists in children's home environments. Children who reside in homes with access to learning materials and experiences (e.g., books, computers, stimulating toys, skill-building lesson, or tutors) enjoy a distinct advantage over children who do not have the same affordances. As a result, the disparate nature of children's early literacy experiences from birth through the age of four creates inequities in reading preparedness as they enter kindergarten (Bradley, Corwyn, McAdoo, & Garcia Coll, 2001; Waldfogel, 2006).

Once in school, research suggests children lacking strong early literacy skills are slower in their acquisition and development of academic skills compared to children with strong early literacy skills (Morgan, Farkas, Hillemeier, & Maczuga, 2009). Examples of delayed skill acquisition and development include poor overall cognitive development, inclusive of delayed language, memory, and socioemotional processing abilities (Aikens & Barbarin, 2008). These cognitive deficits, coupled with preexisting gaps in literacy skills, further exacerbates existing difficulties with phonological awareness, vocabulary development, and oral and written language skills, found in children underprepared to start kindergarten. These foundational reading skills often remain underdeveloped over the course of children's educational careers resulting in poor test scores and difficulty reading more complicated texts in middle and high school (Biancarosa & Snow, 2006; Buckingham et al., 2013; NCES, 2015; Rand Reading Study Group, 2002; Shanahan, 2017).

The Impact of Instructional Approaches and Teacher Beliefs

In addition to the impact of parent, home, and socioeconomic factors on a child's ability to acquire and develop the literacy skills needed for reading comprehension, a survey of the research literature suggests instructional factors and teacher beliefs also contribute to the development of students' reading comprehension skills. Children who develop limited early literacy skills prior to kindergarten will struggle with reading-related activities for the duration of their academic careers (Wigfield, Gladston, & Turci, 2016). Discussion will now turn to some of the instructional factors and teacher beliefs highlighted in the research literature that adversely impact students' reading achievement in the primary grades as measured by standardized tests, class grades, and course completion.

A generalized approach to literacy instruction. Children begin school with varying levels of literacy knowledge and skills to attend to different types of reading activities they will encounter in elementary school, and later, middle and high school. A child's ability to read at grade level by the end of fourth grade is a prominent indicator of success in school, as well as later in life (Nelson et al., 2001). Yet, despite this fact, a review of NAEP scoring patterns for fourth grade students from 1992 – 2015 demonstrates students' scores are consistently in the 217 – 222 range. These scores highlight the persistent underachievement of 4th grade students over the past 25 years as 238 is the minimum score needed to be considered "proficient" (NCES, 2015).

One potential cause for this chronic underperformance is the utilization of a "one-size-fits-all" phonics approach in elementary schools (Shanahan, 2017). Literacy instruction at the elementary level often focuses on whole group instructional practices focused on letters, sounds, spelling patterns, and pronunciations. While research studies

strongly support the use of phonics instruction to improve students' decoding, spelling, and oral reading skills, not all students are at the same developmental reading level (Connor, Morrison, & Katch, 2004; Shanahan, 2017). Literacy instruction is commonly delivered to the *middle* of the class with not enough support in place for children who are developmentally ahead or behind in their reading skill development. Because of unmet literacy needs in elementary classrooms, many students are behind in their ability to use more sophisticated cognitive strategies to read for comprehension when they transition from a *learning to read* to *reading to learn* approach in grade four (Boulware-Gooden, Carreker, Thornhill, & Joshi, et al., 2007; Solis et al., , Vaughn, & Scammacca, 2015).

As students' progress into middle and high school, they often need remediation and/or refinement of these skills to appropriately attend to the various content area texts they are being asked to comprehend in their content area classes. Specifically, students need to be able to: (a) acquire and activate relevant background knowledge, (b) employ grade appropriate decoding skills, (c) recognize and correctly interpret content specific vocabulary, (d) and be motivated to engage in content area reading tasks (Pardo, 2004). The ability to remediate and refine these skills is something many middle and high school teachers do not have in their pedagogical repertoires. However, as previously stated, the need for literacy skill development, especially at the middle and high school level, is not new (Heller & Greenleaf, 2007).

Teacher beliefs and literacy instruction. Thus far, through the conceptual framework of EST, discussion has highlighted: (a) parental, (b) home, (c) socioeconomic, and (d) instructional factors found in the literature that has formulated a deeper understanding of the underlying causes of the POP for this study. As stated in the

previous section, students in middle and high school content area classrooms possess varying level of literacy skills; however, many students need to be explicitly instructed how to: (a) acquire and activate relevant background knowledge, (b) employ grade appropriate decoding skills, (c) recognize and correctly interpret content specific vocabulary, (d) and be motivated to engage in content area reading tasks (Pardo, 2004). Despite the literacy needs of their students, many secondary teachers do not possess the necessary skills to provide the level of literacy instruction needed in their classrooms. Discussion will now turn to examining secondary teachers' beliefs about literacy instruction and how these beliefs impede implementation of literacy skills and/or programs with students (McCoss-Yergian & Krepps, 2010).

An abundance of research exists regarding the benefits of implementing content area literacy practices in secondary classrooms. Yet, even with this abundance of literature, resistance among secondary teachers to include reading instruction in their classrooms is high (McCoss-Yergian & Krepps, 2010; Moje, 2015). Seemingly many secondary school teachers across the country are guarding outdated professional habits and beliefs, which, in turn, is impeding the advancement of students' literacy skills (McCoss-Yergian & Krepps, 2010). As the literature reveals, three factors overwhelmingly capture the nature of secondary teachers' resistance to implementing literacy instruction in their classrooms: (a) historical traditions and beliefs, (b) the perceived roles of content teachers, and (c) a lack of self efficacy in the domain of literacy instruction (Cantrell, Burns, & Callaway, 2009).

For the secondary teacher, the suggestion that he or she should be utilizing instructional time for the purposes of teaching students how to read is counterintuitive.

Many middle and high school teachers view themselves as content specialists who feel their primary purpose in the classroom is to disseminate course information to students. This belief is not new to secondary education. The teaching of reading was believed to be the function of elementary teachers throughout the 19th and 20th centuries (Shanahan & Shanahan, 2008; Snow & Moje, 2010). The federal government's No Child Left Behind Legislation of 2001 did nothing to challenge these views as reading reform was focused only on grades 3-8. Only recently, with the adoption of the Common Core State Standards in 2013 has the focus on literacy instruction included all teachers across K-12 (National Governors Association Center for Best Practices, & Council of Chief State School Officers, 2010). However, the assertions within the Common Core State Standards are still in their infancy and many secondary teachers are having difficulty accepting these proposed changes in instructional responsibility. Moving secondary teachers toward embracing the development of literacy skills with students requires a paradigm shift in their instructional practices that many teachers find uncomfortable.

In addition to secondary teachers' beliefs that they are disseminators of content in their specific disciplines, and that literacy instruction is a function of elementary teachers, many secondary teachers often express that they are not adequately prepared to teach literacy practices to their students (Cantrell, Burns, & Calloway, 2009). Traditional teacher preparation programs may require prospective educators to complete one course in content area literacy instruction during their preservice training, while teachers who come to education through alternative certification routes often have no specific coursework or experience related to teaching content area literacy skills (International Literacy Association, 2015). Due to the variety of ways middle and high school teachers

can obtain the appropriate credentials to teach, it cannot be guaranteed that new teachers have the pedagogical knowledge and/or skills needed to help students refine and advance their reading abilities (American Association of Colleges for Teacher Education, 2002).

Beyond the lack of preparedness of new teachers entering classrooms, many in-service teachers do not implement content area literacy strategies in their classrooms even after receiving PD on the topic (Adams & Pegg, 2012). Training opportunities regarding the implementation of content area literacy strategies at the middle and high school levels have been available to teachers for decades through graduate coursework and PD workshops. A limited number of studies have examined the extent to which middle and high school teachers' have integrated content area literacy practices into their classrooms and what factors drove their decisions (Hall & Hord, 2006). In addition to the beliefs of in-service teachers already mentioned, teachers also report lacking the necessary self efficacy to correctly implement literacy practices in their content area classrooms (Cantrell & Hughes, 2008).

For the purposes of this study, self efficacy is defined as a teacher's "belief or conviction that they can influence how well students learn, even those who may be difficult or unmotivated" (Guskey & Passarro, 1993, p.3). Teacher efficacy is linked to various teacher factors including effective classroom practices and higher student achievement (Cantrell & Hughes, 2008). Within the context of literacy instruction, it can be inferred that teachers' sense of self efficacy with literacy instruction relates to their abilities and/or desire to help students overcome literacy deficiencies in different content areas. As a result, the promotion of self efficacy skills with middle and secondary teachers in content area literacy is needed for improvements in adolescent literacy

achievement to be recognized.

Conclusion

As the United States seeks to continue its' position as a world power into the 21st century, it is imperative that the country's economy be robust and relevant on the global stage. With a constantly evolving, technology-driven, highly literate world awaiting high school graduates, it is essential they have the necessary reading skills to be active and contributory members of a highly skilled, globalized workforce. As the literature introduced in this chapter has revealed, the issue of stagnant reading performance is not unique to this small, suburban New England high school. The problem of reading underachievement among high school students cuts across local and state lines in this country.

A further review of the literature related to providing high school graduates with the reading comprehension skills necessary to be successful in the 21st century highlights the complex nature of the reading process. As discussed from the theoretical perspective of EST, numerous environmental factors can both directly and indirectly impact a child's early literacy development, as well as his or her reading development over time. A broad review of potential factors contributing to this study's POP has been identified through the research literature and discussed within the following categories: (a) the role of parents, (b) home environment, (c) SES, (d) instructional factors, and (e) teacher beliefs.

In the dual role as researcher and principal in the high school in which this POP is situated, the researcher has identified and evaluated local and global factors possibly contributing to the POP under examination in this study. Based on this review, three factors from the research literature (e.g., teacher beliefs, instructional preparedness, and

motivation) best align with faculty statements at the beginning of the chapter regarding the nature of 9th grade students' stagnant test scores in this small suburban New England high school. Because of this information, the focus of this study now turns to a deeper investigation of the aforementioned factors believed to be undergirding the POP of this study in Chapter Two.

Chapter Two

Reading Instruction at a Small Suburban New England High School

As discussed in Chapter One, the POP for this study concerns the underachievement of 9th grade students on measures of reading comprehension at a small suburban, New England high school. Discussion now turns to the findings from a needs assessment study that investigated how 9th grade teachers and students approach reading comprehension instruction at this school. This investigation sought to answer research questions about the perceptions of 9th grade teachers and their students regarding pedagogical activities each group believed was most motivational for students to engage in content area reading. Following a description of the context of the study, a review of methodology provides the basis for the needs assessment that includes a description of participants, variables, instrumentation, and data collection and analysis methods. This chapter finishes with a summary of findings addressing the research questions based on factors presented in Chapter One.

Context of Study

This needs assessment study was conducted at a small suburban, middle-class, New England high school. In 2016 and 2018, *U.S. News and World Report* ranked this high school as one of "America's Best High Schools" (Staff, 2019). Indicators used by *U.S. News and World Report* to determine this designation included demographic information, Advanced Placement participation, proficiency percentages on state assessments, and graduation rate. These indicators are placed into a formula that creates a college readiness index for high school graduates and ranks high schools accordingly across the country from highest to lowest. The school also hosted the New England

Association of Schools and Colleges in October 2018 for its decennial accreditation visit. The school exceeded expectations across the five standards used to determine a school's accreditation status: (a) learning culture, (b) student learning, (c) professional practices, (d) learning support, and (e) learning resources. In July 2019, the school's accreditation was continued for another ten years (Ingano, 2019). Finally, this high school was included in *Newsweek Magazine's* top 5,000 high schools for Science, Technology, Engineering, and Mathematics achievement in the United States in 2019 (Cooper, 2019).

Although six prominent private high schools, one vocational technical high school, and several school choice high schools exist within 15 miles of this school, approximately 93% of 8th grade students elect to enroll in 9th grade each year. This high school has operated since 1935 and moved into a new school building in 2007. In addition to the new building, the school enjoys strong financial support from the community allowing its' approximately 720 students and 63 teachers unfettered access to the school's rich and robust academic and co-curricular programs. According to the state department of education's statistics for this high school, 84% of the student population is White. The remaining 16% of the student population is comprised of Hispanic (6.4%), Asian (4.3%), Bi-Racial (2.8%), African American (2.1%), and Native American (0.4%) students. All teachers at this high school are appropriately certified in their instructional content areas.

As previously noted, reading comprehension scores on building based posttests, state mandated proficiency exams, and standardized reading measures such as the SAT have remained stagnant at this high school. A review of reading comprehension scores from the years 2017, 2018, and 2019 yielded average scores of 2.26/4.00 on building-

based posttests, 2.48/4.00 on state mandated proficiency exams, and 499/800 on the reading portion of the SAT. The stagnant nature of reading achievement observed at this high school can be found at the national level, as well. The overall average reading scores of 12th grade students' reading scores on the NAEP during the years 1992-2015 averaged 286-292. These scores are considered "basic" by NAEP standards and suggests a potential inability of students to read and interpret complicated text in post-secondary and occupational environments (NCES, 2015).

Curriculum offerings for students at this high school are robust. Academic study is available for students at the College Preparatory, Honors, and Advanced Placement levels. In addition to 19 Advanced Placement courses offered on site, students can elect to participate in various STEM related courses to supplement their core academic programs. Students also have the opportunity to sign up for "early college" courses offered at the school by a local community college. For $100 per course, students can obtain three college credits if they earn a passing grade in introductory English, Mathematics, Science, or Computer Technology.

Outside of the classroom, students may participate in 42 clubs and 55 athletic teams at the Freshman, Junior Varsity, and Varsity levels. The school offers a music curriculum that includes performance bands, general music theory, film scoring, and audio recording opportunities. Students can participate in multiple art offerings that include drawing, painting, ceramics, advanced figure drawing, and competitive art competitions. There is also a popular "Best Buddies" and Unified Athletics program available at this high school that pairs regular education students with special needs students to participate in athletic and other social activities. In 2018 and 2019, the Unified

Athletics program garnered national recognition as a Unified Champion school by Special Olympics and ESPN. If there is a course, club, sport, or other activity not offered at this school, students may petition the administration to start one. After graduation, 98% of seniors pursue post secondary education, while the remaining 2% enlist in the military or join the workforce.

Purpose of Study and Research Questions

The purpose of this needs assessment study was to investigate factors that influenced the development and use of reading comprehension skills in 9th grade classrooms in a small suburban, middle-class, New England high school. The targeted areas of investigation focused on the perceptions of 9th grade teachers and 9th grade students regarding the role motivation had on students' reading comprehension scores. Specifically, the investigation examined the beliefs of 9th grade students and 9th grade teachers regarding what they perceived to be motivational activities that engaged students in content area reading.

Within the context of this needs assessment study, four research questions emerged for investigation:

RQ1: What pedagogical activities did 9th grade students perceive to motivate them to engage in content area reading?

RQ2: What pedagogical activities did 9th grade teachers perceive to motivate 9th grade students to engage in content area reading?

RQ3: What similarities existed between 9th grade students' and teachers' perceptions of pedagogical activities that motivated students to engage in reading in content area classes?

RQ4: What differences existed between 9th grade students' and teachers' perceptions of pedagogical activities that motivated students to engage in reading in content area classes?

Research Design

This needs assessment study used a descriptive quantitative research design (Creswell & Plano Clark, 2011). This research design allowed for the exploration of similarities and differences between 9th grade students' and teachers' perceptions of pedagogical activities believed to motivate students to engage in reading in their content area classes. Survey data were used to explore these perceptions.

Method

The following section provides a description of the participants, instruments, and procedures for recruitment, data collection, and data analysis.

Participants

The participants included 9th grade teachers and students in a small suburban, middle-class, New England high school.

Students. One-hundred and three 9th grade students had an opportunity to participate in this needs assessment study. Of the 103 students, 26 (24%) returned the necessary documents with parental signatures and completed the survey. Out of 26 students who completed the survey, 14 (54%) were female and 12 (46%) were male.

Teachers. Sixteen 9th grade teachers representing each of the five core academic departments consented to participate in this study. Nine (56%) teachers were male, and seven (44%) were female. The English Department had four representatives, while the Social Studies, Mathematics, Science, and Foreign Language Departments had three

representatives each. Each teacher who participated in the study was appropriately certified to teach in his or her content area by the state's Department of Education. As shown in table 2.1, the range of years teaching 9th grade students ranged between 14 – 22 years with the average number of years teaching freshmen calculated to be 16.

Table 2.1

Faculty total years of teaching 9th grade students (n = 16)

Years at the School	*n* (%)
11-15 years	*6* (37.50)
16-20 years	*7* (43.75)
More than 20 Years	*3* (18.75)

Instruments

The Student Motivation to Read Survey (see Appendix A) and The Teacher Survey of Reading and Motivation (see Appendix B) included 27 items designed by Gutner (2011). The purpose of these instruments was to gather the perspectives of 9th grade students and teachers about their perceptions of activities that motivated 9th grade students to engage in content area reading. Students and teachers responded to each of the 27 items using a five-point Likert scale: (1) Strongly Disagree, (2) Disagree, (3) Neutral, (4) Agree, and (5) Strongly Agree. The teacher survey included the same 27 items as the student survey but were altered to reflect teachers' perceptions. An example of survey items is included in table 2.2.

Table 2.2

Example survey items for teachers and students

Teacher Item	Most of my students are more likely to read if I am enthusiastic about the content or assignment.
Student Item	I am more likely to read if my teacher is enthusiastic about the content or the assignment.

Reliability was examined by determining the internal consistency of the 27-item scale (Gutner, 2011). The findings revealed high internal consistency as determined by Cronbach's α (α = 80). An α level of this magnitude indicates a high probability that the items on the survey measured one underlying construct, motivation (Gutner, 2011, p. 62).

Procedure

The following section includes information on participant recruitment, data collection, and data analysis.

Participant recruitment. One-hundred and three 9th grade students and sixteen 9th grade teachers were provided an opportunity to participate in the study. To recruit teachers to take part in the study, a meeting was conducted to explain the study and to ask for their participation. The teachers were advised that participation was voluntary and that there were no repercussions for not participating as the researcher also served as their principal. All 16 teachers agreed to participate in the study and received the Teacher Consent Document electronically (see Appendix C). The consent forms were completed and returned to the researcher.

The 103 students eligible to participate in the study were invited by their teachers to take part in the study. Because students were not of legal age to consent to participate in the study, parents of the 103 students were provided with a Parent and Student Assent/Consent Document (see Appendix D). The participating teachers distributed the Parent and Student Assent/Consent document in their classes and instructed students to take them home to their parents. The researcher sent an electronic copy of the document to parents and students via email, along with a brief explanation of the study. It was advised that participation was voluntary and that there would be no repercussions for not

participating as the researcher served as the students' principal. The teachers collected the Parent and Student Assent/Consent document over a period of five days. Within the five-day period, the researcher made two phone calls to parents via the school's automated messaging system. Twenty-six students returned the document signed by both parent and student. This return rate represented 25.24% of the 103 students and parents eligible for the study. A low return rate is not atypical for this high school. Beginning of year forms such as emergency information, health information, and insurance information can take months to collect from all students after months of repeated phone call and email reminders. In my experience as a high school principal, parents and students do not always listen to their phone messages or read their emails or communicate with each other. Furthermore, this is the first time that a study like this has been conducted and it is possible there could have been uncertainty about the needs assessment among parents and students.

Data collection. Teachers and students were sent a link to a Google form containing the survey to their school email addresses. Teachers and students had five school days to complete the surveys.

Data analysis. Participants' responses were downloaded from each survey created in Google Docs to the Statistical Package for Social Sciences (SPSS) software program. A mean score across items was calculated as well as descriptive statistics. An independent samples *t* test was used to explore differences between teacher and student mean survey responses. In addition, item level descriptive analyses were conducted to understand differences in overall mean scores.

Results and Discussion

The results and discussion are based on a descriptive comparison of the teachers' and students' mean scores. The means and percentage of sample for teacher and student responses are presented for each of the 27 survey items in Appendix E. While no statistically significant differences between the overall group means of the teacher (M = 3.71, SD = .145) and student (M = 3.61, SD = .199) scales was found; (t (40) =1.61, p = .116), interesting similarities and differences emerged in the comparison of the mean item responses of teachers and students. These similarities and differences are discussed, followed by a summary of the data.

It is important to note, however, that the differences in perspectives between teachers and students highlighted in this needs assessment is not surprising as each group answered the survey from different perspectives. As discussed in Chapter One, teachers relied on their experiences as students, their preservice training, and classroom teaching experiences to anecdotally guide their instructional practices. Students, on the other hand, did not have the same breadth of experiences as their teachers, but articulated what pedagogical activities they find more motivating than others from their school experiences.

Students' Perceptions

Three teacher behaviors emerged from students' responses as most important in content area classrooms to motivate content area reading engagement. Fourteen out of 26 (54%) student respondents indicated that teachers had a responsibility to motivate them to read class material. Sixteen out of 26 (62%) student respondents indicated they were more likely to read for class if they felt their teacher cared about them. However, 19 out of 26 (73%) student respondents indicated that the degree of enthusiasm their teachers

displayed for the content or reading assignment was a factor in deciding to read or not.

Nineteen of 26 (73%) student respondents indicated they were motivated to engage in content area reading if they were going to be tested on the assigned reading material. The same number of student respondents indicated a preference for multiple-choice and true/false assessments versus expository assessments that required students to engage in descriptive and interpretive exercises to demonstrate understanding of content area text. Sixteen out of 26 (62%) student respondents indicated they were excited to participate in literature circles and structured discussions of content area text. However, only 8 out of 26 (31%) student respondents indicated formal/informal book clubs motivated them to engage in content area reading. Finally, 19 out of 26 (73%) student respondents identified their levels of self efficacy as a reader as a motivational factor to engage in content area reading.

Teachers' Perceptions

Of the 16 faculty respondents, only three (19%) indicated they were responsible for motivating students to read in content area classes. Fifteen of 16 (94%) faculty respondents agreed students were more likely to read in their content area classes if students felt cared for by them. Likewise, 15 of 16 (94%) faculty respondents indicated the amount of enthusiasm shown for their respective content area with students correlated to whether students read course content.

Faculty respondents had varied perspectives regarding the level of motivation different assessment methods created among students. Fifteen out of 16 (94%) faculty respondents were neutral or disagreed with the idea that tests and quizzes motivated students to read content area material. Similarly, six out of 16 (38%) faculty respondents

indicated agreement that students preferred multiple-choice and true/false assessments compared to more discussion-oriented activities. Ten out of 16 (63%) faculty respondents indicated students were more inclined to read content area material when participating in literature circles/discussion activities. Fourteen out of 16 (88%) faculty respondents also indicated overwhelming agreement that the use of informal/formal book clubs highly motivated students to read. Finally, only four out of 16 (25%) faculty respondents agreed students' self efficacy in content areas impacted their motivation to read, while 10 out of 16 (63%) faculty respondents disagreed.

Similarities between Teachers and Students

Of the items selected for discussion, fewer similarities than differences existed between the perceptions of teachers and students. Ninety-four percent of faculty respondents and 87% of student respondents agreed that teacher enthusiasm for their respective content was a motivating factor for students to read content area text. Similarly, 94% of faculty respondents and 62% of student respondents indicated that demonstration of teacher caring favorably impacted student motivation to engage in content area reading. Also, 63% faculty respondents and 62% of student respondents indicated favorable opinions toward the use of literature circles and structured discussion groups to motivate students to engage in reading content area text.

Differences between Teachers and Students

As mentioned in the previous section, there were more differences than similarities between teachers' and students' perceptions of what motivated students to engage in content area reading. Eighty-eight percent of faculty respondents indicated they felt that formal and/or informal book clubs motivated students to engage in content area

reading, but only 31% of student respondents agreed with their teachers; however, 50% of student respondents were neutral on this item. Possibly, students would have a more favorable opinion if exposed to a book club. Seventy-four percent of student respondents indicated the use of testing was motivational for students to read in different content areas; however, only 0.06 percent of faculty respondents agreed. A similar discrepancy in scores existed between faculty respondents and student respondents regarding the use of class discussions versus the use of traditional tests. Fifty-eight percent of student respondents agreed they would be more likely to read for a class discussion, while 63% of faculty respondents disagreed. Fifty-four percent of student respondents indicated it was part of their teachers' job to motivate them to read in different content areas, while only 19% of faculty respondents felt the same way.

Finally, the most dramatic finding of difference between the two groups included 74% of student respondents indicating that their feelings of self efficacy to read in a content area was an important factor in motivating them to engage in text. Conversely, only 25% of faculty respondents agreed with students regarding their assertion that self efficacy influenced students' motivation to read in content areas. Further, 63% of faculty respondents disagreed or strongly disagreed that a student's self efficacy was an important factor in a student being motivated to read.

Overall Summary

As stated at the outset of the Results and Discussion section, no statistically significant differences between the overall group means of the teacher and student scales was found. However, a comparison of the means of the 27 items in this needs assessment study indicated that 9th grade students and 9th grade teachers hold some similar, but

more differing views of what activities are perceived to be motivational regarding getting students' to engage in content area reading.

Teachers reported students are most motivated to read in respective content areas when teachers are enthusiastic, while students reported they are most motivated to read when provided choice in reading materials. Students identified socialized instructional activities, such as discussion groups, literature circles, and book clubs to also be motivational. Students identified feelings of self efficacy as important in determining whether they would engage in reading in different content areas. These primary findings suggested that interventions aimed at increasing students' content area reading self efficacy in the context of socially constructed learning situations may foster increased motivation in students to read. In turn, this increased motivation to engage in content area reading might improve students' comprehension scores in content area classrooms.

Limitations to Needs Assessment Study

There were several limitations to this needs assessment study. First, the researcher is the principal of the research site of this study. Second, the teachers involved in the needs assessment study were exposed to the researcher's beliefs that social experiences are a vital part of students' motivation to engage in acts of learning, in this case, reading content area text. Third, this study only used quantitative information. Extending this study to include qualitative information, thus using a mixed-methods approach, would potentially strengthen the findings of this study as stronger triangulation of teacher and student data could occur (Creswell & Plano Clark, 2011). Fourth, the sample size of students enrolled in the study was problematic as only 26 of 103 eligible students participated in the survey. Securing a higher sample size would aid in providing stronger

validity to the study's findings. Finally, measuring perceptions and beliefs of people is a delicate process easily influenced by events, circumstances, and word meanings (Ambrose et al., 2003). Participant responses to survey items in this study are not guaranteed to be the same if surveyed again.

As demonstrated by the findings of this needs assessment, the teachers of students in the Grade 9 FYE need support in realizing the importance of utilizing socially inclusive pedagogical techniques to increase student motivation levels to read across content areas. The responses from students within the Grade 9 FYE articulated a desire to be social with their peers in their interactions with content area text. Teacher responses demonstrated the need for PD activities focused on how to incorporate socialized pedagogical techniques in their classrooms. Discussion now turns to Chapter 3 where research literature is explored and used to design an intervention that will best meet the needs of teachers and students as described in this chapter.

Chapter Three

Strategies that Support the Development of Reading Comprehension

As evidenced in Chapters One and Two, reading comprehension achievement remains stagnant for students within this small, suburban New England high school. A review of the research literature reveals that reading comprehension achievement is also subpar on the state and national levels as evidenced by local and state test scores, and national assessments such as the SAT and the NAEP. In this chapter, the findings of the needs assessment study in Chapter Two provides the context for the examination of the research literature. Through the theoretical framework of social constructivism, the history of interventions employed to improve students' reading comprehension skills and achievement will be discussed. Based on the research literature, an intervention aimed at increasing student reading achievement in 9th grade content area classrooms will be proposed for trial.

The goal of the needs assessment study was to better understand potential factors that might explain the chronic underachievement (i.e., aggregate scores in the high needs improvement range) of 9th grade students in FYE and content area courses as well as to examine how the attitudes and perceptions of teachers and students could be contributing to students' underachievement. Both students' and teachers' responses in the needs assessment study underscored several important factors that must inform the design intervention for this POP. Students indicated they were most likely to be motivated to read in their content area classes if they had choice over what they could read. Students also indicated a strong preference to engage in reading if they were participating in learning activities that involved socialization with their peers (e.g., literature circles,

discussion groups, informal/formal book clubs). Further, students indicated they would be more motivated to read in their content area classes if the assessments were more discussion based, compared to traditional assessment methods (e.g., tests and quizzes). However, the preference for socialized learning activities expressed by students in the needs assessment study was not shared by the faculty.

Teachers felt that the most motivating activity for students to read in the content areas was teachers' enthusiasm for the content or reading assignment. Teacher responses were largely indifferent or in disagreement with students' feelings that socialized learning activities motivated them to read more than other instructional approaches. Overall, the differences in perception between teachers and students suggested the use of socialized literacy practices by teachers might improve 9th grade reading comprehension scores within this small, suburban New England high school. Discussion will now turn to understanding interventions that may impact these factors from the perspective of social constructivism.

Theoretical Framework

Social constructivism posits that learning happens by pairing an individual's independently constructed knowledge with relevant social experiences as well as cultural activities and tools (ranging from symbol systems to artifacts to language) to form new understandings (Palinscar & Brown, 1988). Social constructivism suggests that an individual does not learn in isolation but rather as an active member within various settings (e.g., home, school, society). What is constructed by an individual and how an individual comes to understand knowledge in various contexts is largely dependent upon their interpretation of these experiences in different settings (Yang &Wilson, 2006).

Vygotsky's (1978) sociocultural theory, a form of social constructivist theory, suggests learning occurs through interactions and dialogue with more knowledgeable others. In the case of a classroom environment, more knowledgeable others might be students and/or teachers. Although social constructivist theory implies the importance of one's interaction with his or her environment in the learning process, it is important to recognize an individual creates understandings of varying knowledge and experiences through internal dialogue. The understandings formed by an individual through internal dialogue are challenged and/or verified through dialogue with others (Scardamalia & Bereiter, 2006; Vygotsky, 1978).

Two themes from Vygotsky's (1978) work clarify the interdependence of socialization and individual processes on the acquisition of knowledge and skills (Valsiner, 1987). First, individual participation in activities with others promotes the internalization of newly acquired knowledge, experiences, and strategies of the world and culture (Palinscar & Brown, 1988). The translated and interpreted work of Vygotsky (1978) also describes the construct of zone of proximal development (ZPD) as an explanation of how learning occurs with a distinction made between actual and potential levels of development. Actual level of development refers to the tasks and activities an individual can independently achieve without support. Potential level of development includes the tasks and activities that an individual can independently complete with guidance and collaboration from more knowledgeable others. As independent mastery increases, support from more knowledgeable others is faded away. Activities developed by teachers must target a student's ZPD through carefully constructed activities. If a task is too easy, students can lose their motivation to participate, and conversely, if the task is

too difficult, the student may give up from frustration (Wilson & Lianrui, 2007).

Second, human action in both social and individual learning situations is mediated by semiotics (Palinscar & Brown,1988). Semiotics include "language; various systems of counting; mnemonic devices; mathematical symbol systems; works of art; writings; schemes, diagrams, maps, and drawings; and all sorts of conventional signs and so on …" (Vygotsky, 1981, p.137). Semiotics serve as tools that aid in the facilitation of co-constructing knowledge and the means internalized to aid future problem-solving learning activities (Palinscar & Brown, 1988). Consequently, the dynamic interplay of semiotic tools, an individual, and environmental interactions work in unison to advance individual learning and development beyond that which direct instruction can achieve alone.

The field of anthropology informs us that semiotics is a distinct part of different cultural settings, including schools (Shapiro & Kirby, 1998). Within a classroom where pedagogy is aligned with social constructivist principles, the teacher plays a critical role in the advancement of individual learning through the utilization and establishment of such semiotic tools as norms and routines, daily collaboration, joint decision making, and students helping other students solve problems. The goal is to develop students' abilities to "jointly construct meaning, commit to finding common ground on which to build a shared understanding" (Palinscar & Brown, 1988, p. 355). This approach to classroom instruction is relatively new as isolated learning activities have been the predominant method of instruction in classrooms to date (Meguid & Collins, 2017).

Transactional Reading Theory and Reading Comprehension

One theory that aligns with social constructivist theory and suggests an act of

reading comprehension is a social endeavor is Rosenblatt's (1978) Transactional Reading Theory (TRT). The tenets of TRT promote reading comprehension as an active learning experience. Discussion will now turn to defining reading comprehension within the context of this study, as well as exploring the major tenets of TRT as a plausible explanation for how reading comprehension occurs in an individual.

Reading comprehension is a complicated task that is described in multiple ways (Pardo, 2004). The Rand Reading Group (2002) defined the act of reading comprehension as "a concurrent process of selecting and creating meaning through interaction and involvement with written language (p. 11)." A year later, Duke (2003) included the words "navigation" and "critique" to the Rand Reading Group's explanation of how a person comprehends text. Her conception of reading comprehension is steeped in the belief that students move through text in a navigational manner to identify words and concepts that make sense based on their existing knowledge.

A useful definition of reading comprehension for teachers might be the manner in which students "construct personal meaning through interacting with text through the utilization of existing knowledge and experience, information in the text, and the position the student takes in relationship to the text" (Pardo, 2004, p. 272). There are many interpretations of reading comprehension; however, a commonality among them is the incorporation of underlying principles of sociocultural learning theory within TRT. These definitions of reading comprehension serve as a starting point for understanding TRT and its depiction of how reading comprehension takes place in an individual.

For this study, reading comprehension is viewed as a transaction between the reader and text (Rosenblatt, 1978). From the point of view of TRT, the reader encounters

and interprets literary text within a moment in time that is unique for the reader and cannot be specifically replicated. Without the presence of a reader, literary text, and unique moment in time interacting together, comprehension cannot occur (Rosenblatt, 1978).

The depth of understanding that a reader can glean from these transactional experiences is dependent upon the sophistication of a reader's preexisting knowledge. Each reader's preexisting knowledge is unique and applied independently to each text and reading comprehension opportunity (Butcher & Kintsch, 2003). The more existing knowledge a reader brings to a comprehension experience, the more likely he or she is to correctly comprehend text (Shallert & Martin, 2003). As readers work through various texts, they make connections between what they are reading, and ideas encountered in other texts, places they have experienced, and events viewed in the real world (Raudenbush, 2018). A reader's ability to make connections between existing knowledge and text is a key aspect of the transactional experience, most notably when trying to decipher dense, difficult text, often encountered in content specific high school classrooms (Raudenbush, 2018).

In addition to an individual's unique background knowledge, other unique characteristics exist in individuals that impact the transactional nature of the reading process. These characteristics include: (a) the amount of specific reading skills an individual possesses, (b) an individual's level of cognitive development, (c) the cultural experiences that shape an individual's existing knowledge, (d) the purpose an individual brings to reading a text, and (e) the level of motivation and engagement an individual has in a text (Narvaez, 2002; Pardo; 2004; Schallert & Martin, 2003).

Characteristics of text serve an important role in TRT. Just as an individual brings a unique set of characteristics to the transaction where comprehension occurs, so does the text involved in the transaction. Text structure (e.g., genre, vocabulary, language, and word choices) makes each text unique (Pardo, 2004). The content of text, its readability level, font type, and size are all influential factors that impact an individual's interaction with the text (Tracey & Morrow, 2004).

The intent of the author writing the text also influences an individual's interaction with it. This is especially true if a foreword, book jacket, or more knowledgeable other makes the author's intent known to the individual prior to reading (Rosenblatt, 1978). The author's intent is commonly referred to as the "gist" of the text and is defined as "what people remember" or "the main ideas of the text" (Pressley, 1998, p. 46). Standardized reading tests often seek to identify whether an individual can identify the author's intent. As a result, understanding the "gist" is important, especially in academic environments.

Thus far, the characteristics of an individual and text have been explained from a TRT perspective. The final component of TRT is the role that context plays in facilitating the transactional process between the reader and text (Rosenblatt, 1978). The meaning generated by an individual from interacting with the text results in specific understandings that cannot be replicated at a different time or in a different context. Context also denotes actions taking place around the transactional experience between the individual and the text. In a classroom setting, teachers create the context for this transaction. Teacher assignment of text, generating questions from it, summarizing the main ideas, and other teacher-designed activities provide examples of context within

which an individual interacts with the text for some purpose (Miller & Escobar, 2002).

Reading Comprehension Strategies and Instruction

With a theoretical framework established for understanding how reading comprehension occurs through a sociocultural lens, discussion now moves to a survey of reading comprehension interventions. These interventions evolved from a variety of singular cognitive techniques supported through instructional contexts that align with a sociocultural perspective, to the grouping of different combinations of these cognitive techniques into routines, to later considering student motivation as a key component for improving students' reading comprehension. The extension of content area reading skills to include advanced disciplinary specific literacy techniques will be explored, as will the roles and responsibilities secondary teachers must understand through PD if improvements in content area reading comprehension is to be realized.

Early Reading Comprehension Research

Reading comprehension research has a long history dating back to 1975 (Pearson, 1985). The development of interventions aimed at reading comprehension has been largely based on understanding the characteristics of good readers. As Duke and Pearson (2002) inform us, good readers engage in the following behaviors: (a) they are active readers; (b) they have established goals in mind when reading and evaluate if their goals are being met; (c) they review the text prior to reading it and note its structure by section to determine relevance to accomplishing identified reading goals; (d) they predict with accuracy what is coming next; (e) they make decisions about what to scan, omit, and what should be reread; (f) they develop, alter, and challenge the meanings made as they read; (g) they decipher meanings of words and concepts by using context clues; (h) they

utilize their existing knowledge to integrate and compare with material in the text; and (i) they are able to read different kinds of text appropriately. Utilizing this knowledge of the habits of good readers, researchers have affirmed reading comprehension can be successfully taught to students (Block & Pressley, 2002; Pressley & Afflerbach, 1995).

An Instructional Model for Reading Comprehension

Effective reading comprehension instruction has evolved into the integrated use of different strategies and techniques (National Reading Panel, 2000). As the research literature reveals, researchers have used various combinations of strategies and techniques to improve students' reading comprehension. A commonality among them is their alignment with TRT, as well as Pearson and Gallagher's (1983) *Gradual Release of Responsibility Model*. Aligned with the principles of sociocultural learning theory, this model suggests that learning occurs through interactions with others, and when these actions are intentional, specific learning can occur (Fisher & Frey, 2007). There are five parts to this model: " (a) explicitly describing the strategy by the teacher and when it should be used, (b) teacher modeling the strategy in action, (c) collaborative use of the strategy in action, (d) guided practice use of the strategy with a gradual release of responsibility from teacher to students, and (e) demonstration of independence by students through using the strategy correctly" (Duke & Pearson, 2002, p. 209).

As demonstrated in Figure 3.1, teachers move from being in total control of the instructional process through explicit modeling and direct instruction with students, to joining with students in a shared modeling and instructional environment with students, to eventually fading away as the student master's the strategy and asserts its use independently or what Pearson and Gallagher (1983) have termed the gradual release of

responsibility.

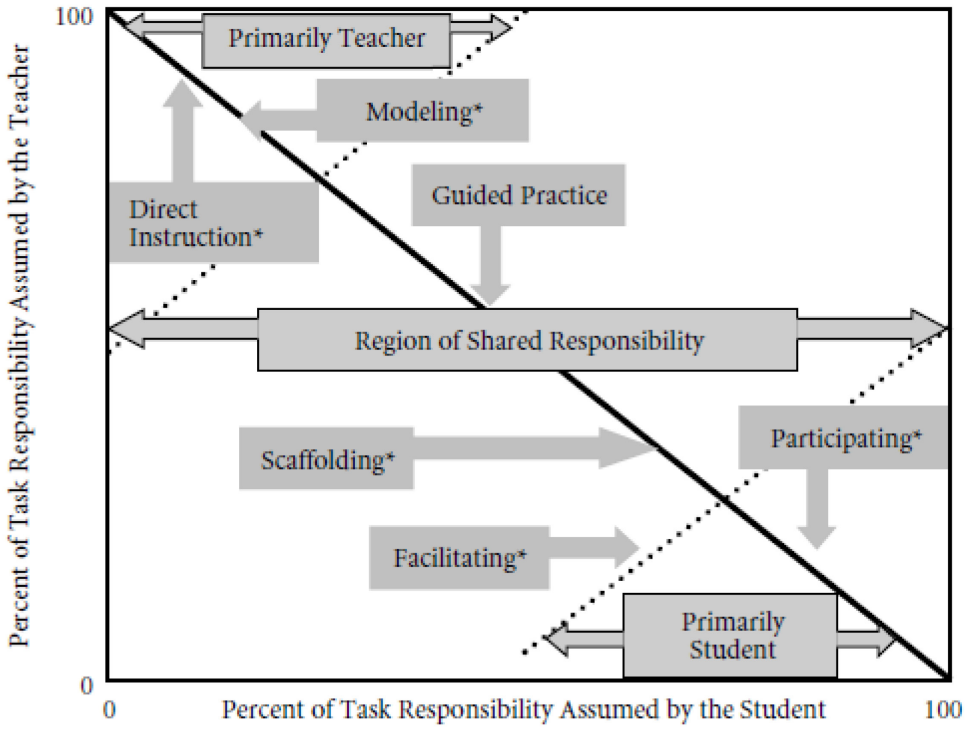

Figure 3.1 Gradual release of responsibility (Pearson & Gallagher, 1983).

The transition from teacher led to student led instruction within the gradual release of responsibility model is dependent upon a student's successful movement through their ZPD (Vygotsky, 1978) and the scaffolding (Wood, Bruner, & Ross, 1976) provided by the teacher or more knowledgeable other in the learning environment. Vygotsky defines an individual's ZPD as "the distance between the actual developmental level of an individual as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance, or in collaboration with more capable peers" (Vygotsky, 1978, p.86). The movement of a student through their ZPD is reliant upon scaffolding activities provided by the teacher or other students in the learning environment. These activities assist the student to help him or her develop the knowledge and skills to gradually reach independent mastery. As

students' mastery increases, their scaffolding support is slowly removed until they can complete the task without assistance (McLeod, 2012).

Independent Comprehension Strategies

The gradual release of responsibility framework serves as an instructional model for the teaching of reading comprehension strategies. Discussion will now turn to individual reading comprehension strategies that can be employed by teachers to improve students' comprehension of text. These strategies include: (a) predicting, (b) thinking aloud, (c) text structure, (d) visual representation of text, (e) questioning, and (f) summarizing (International Literacy Association, 2015; Duke & Pearson, 2002). As Moje (2010) articulated, there exists little research literature examining effective comprehension improvement strategies at the secondary level. Implementation of these strategies involves teacher-to-student and student-to-student interactions, which align with the findings of the needs assessment study in Chapter Two. Both teachers and students indicated that socialized learning practices motivate student engagement in content area reading.

The act of prediction in reading comprehension is the student's use of making prior knowledge relevant to the material he or she is attempting to read and understand (Smith, 1976). Understanding that schema theory serves as the theoretical foundation from which the strategy of prediction developed, the use of schemas provides a plausible explanation regarding how people make sense of what they are reading through activating preexisting knowledge to interpret new knowledge encountered in written text. Early studies by Hansen (1981) provide prominent examples of how prior knowledge activation can greatly assist reading comprehension. Examined through the reading of narrative

texts with students in an elementary setting, students were asked to predict what characters in a narrative story might do using their experiences in similar settings. Hanson concluded that prediction as a reading comprehension strategy was useful based on the statistically significant improvements students made on measures of reading comprehension – both with teacher support and independently. However, it is unclear whether the same success using predicting in reading expository texts would yield improvement in comprehension scores as students may have misconceptions or limited prior knowledge of certain subjects. For example, Guzzetti, Snyder, Glass, and Gamas (1993) conducted a meta-analysis of 23 studies between 1989-1991 that sought to determine the role of students' preexisting knowledge of various science content to accurately understand more advanced concepts presented in textbooks. In nearly half of the studies, misconceptions uncovered in students' preexisting knowledge accounted for difficulty in correctly understanding new text.

In a think-aloud, the second reading comprehension strategy examined here, the teacher or student openly states what they are thinking while reading. This strategy has demonstrated success in improving students' reading comprehension when they engage in a think-aloud during independent reading activities and when teachers conduct think-alouds when reading to students (Duke & Pearson, 2002; Eccles & Arsel, 2017). A classic study by Bereiter and Bird (1985) included 40 female and 40 male middle school students in Canada who were trained in the use of think-aloud as they read. Two groups of 20 males and 20 females represented the treatment and control groups. Utilizing pretest and posttest reading comprehension scores of students who participated in silent reading (control) and think-aloud reading (treatment) a multivariate analysis of

covariance was completed. Results from this analysis demonstrated students who used the think-aloud strategy scored higher than students who read silently.

The emphasis on text structure, a third reading comprehension strategy emphasized by researchers in the latter part of the 20th century, focused on the effectiveness of teaching students to interpret the structure of narrative and expository texts to better organize their understanding and improve their ability to recall important ideas (Duke & Pearson, 2002). The underlying assertion of this research was that it was the structure of text, not specific content that students would encounter outside of the classroom. Research in text structures has taken the form of story structure and informational text structure (Denton Bryan, Wexler, Reed, & Vaughn, 2007). Story structures are more commonly known as story maps. Categories contained on these maps include: (a) setting, (b) problem, (c) goal, (d) action, (e) outcome, (f) resolution, and (g) theme. Teachers model how to fill in each category, engage in guided practice with students as they learn how to correctly fill in categories, and then students participate in independent activity to complete the maps on their own (Stevens, Van Meter, & Warcholak, 2010).

Studies undertaken by researchers demonstrate that story structures can improve reading comprehension with students from kindergarten to high school. Stevens et al., (2010) conducted a study of kindergarten and first grade students across three elementary schools in the eastern United States. One group of students received story structure instruction and one group received traditional storybook instruction. A MANCOVA was conducted to analyze pretest scores demonstrating no significant differences in recall ability between the groups prior to the intervention. A MANCOVA was also conducted

as part of a comparison of each group's posttest scores on a reading subtest of the Metropolitan Achievement Test. Students exposed to story structure instruction scored higher than students who received traditional storybook reading instruction. Similarly, in a study involving 79 high school freshmen, Fagella-Luby, Schumaker, and Deshler (2007) examined the effect of story structure pedagogy on students' reading achievement in English class. Students exposed to story structure pedagogy scored higher on end-of-unit reading comprehension assessments compared to students who did not receive story structure pedagogy after comparing pretest and posttest scores.

Informational text structures focus on using the structural features of expository texts to assist students' understanding of what they have read. Expository text is typically found in course specific textbooks and tends to be more difficult for students than typical story reading structure. Difficulties students face in comprehending expository material is often due to their unfamiliarity with technical content and vocabulary, a high density of facts, and cognitively demanding concepts (McCormick & Zutell, 2011). For students to benefit from using an informational text structure approach, it is recommended they follow the text's structure to build recall. Bartlett (1978) and Taylor (1980) point out that proficient readers have an easier time using structural features of text than struggling readers. Several studies, however, have suggested that various approaches to teaching informational text structures can benefit students.

In an early study demonstrating how students can benefit from using structural elements in texts to aid in comprehension, 102 ninth-grade students enrolled in a junior high school in Arizona were given a passage of text about oil spills (Meyer, Brandt, & Bluth, 1980). Half of the students received a version with headings and subheadings,

while the other group received only text. On measures of reading comprehension associated with the text, results from an ANOVA indicated students who had headings and subheadings to structure their understanding of text scored higher than their peers without the headings.

Visual displays, the fourth strategy examined here, assist readers in organizing and recalling what they have read. Similar in nature to how visual representations help readers comprehend story and informational text structures, visual displays provide concrete and memorable references for readers. The same research on text structures also is relevant when discussing visual representations of text (Duke & Pearson, 2002). An early study demonstrating the significance of employing visual representations of text with students to improve their reading comprehension was conducted by Armbruster, Anderson, and Meyer (1991). Named the *Framing Project*, researchers worked with twelve teachers in a small Midwestern elementary school to produce instructional graphics called "frames" to represent the main concepts and interrelationships of four readings on the American Revolution located in students' social studies books. Topics such as conflict, cause-effect relations, descriptions, and explanations were "framed" for students in a visual manner. These frames took the appearance of Venn Diagrams, K-W-L charts, and similar types of graphic organizers. Three-hundred and sixty-five students participated in the study. Six teachers and their students utilized the frame approach to read and discuss the different pieces of text. The remaining 6 teachers and their students served as the control group and followed the directions in social studies' textbooks to have students read silently. Both groups were given the same pretest and posttest multiple choice assessments and short writing prompts. An analysis of students' pretest and

posttest scores showed students in the framing condition scored 11% higher (on average) than students who did not experience the framing condition.

In addition to using visual displays with students to assist with their organization and recall of text, summarizing strategies are also useful for students to employ to check the accuracy of their understanding of a piece of text they have read. A prominent strategy in the literature demonstrating the importance of summarizing as a method of improving student comprehension is called *Generating Interactions between Schemata and Texts* (GIST) (Cunningham, 1982). Teachers who employ GIST show students how to summarize chunks of text into 15 words or less using sentences and then gradually extending to full paragraphs.

The GIST technique involves the teacher selecting an informational paragraph from a textbook. The teacher then models how to identify key ideas and vocabulary and then reads the paragraph aloud with students. As the teacher reads the paragraph, he or she periodically stops to answer, "who, what, when, where, and why" questions with students as appropriate in the paragraph. From the answers to these questions, the teacher and students work together to create a summary of information gleaned from the text. Students transition to working in pairs and employ the same steps modeled by their teacher with a new piece of text. Students complete the GIST activity independently and provide their own independent summaries to the teacher and/or peers in the class.

Bean and Steenwyk (1984) compared the efficacy of GIST and the procedural approach of McNeil and Donant (1982) with students in the sixth-grade. Sixty 6th grade students in a southern California junior high school were equally divided into 3 groups of twenty students. One group of twenty students experienced the GIST method, 1 group of

twenty students experienced the procedural approach to summarization, and the remaining group of twenty students served as the control group. Bean and Steenwyk concluded from results garnered from a one-way ANOVA comparing the three groups that GIST and the procedural approach improved students' abilities to write clear summaries of text, as well as their abilities to comprehend text as measured on a standardized test. Although it could be argued the two approaches are vastly different, the authors determined the two approaches were equally effective. In addition, the two approaches were also more effective than the control group for writing summaries based on main ideas in text.

The oldest method of instruction, however, focused on determining a student's level of reading comprehension is asking questions before, during, and/or after reading a piece of text (Duke & Pearson, 2002). Anderson and Biddle's (1975) classic study demonstrated that the types of questions students are asked has a significant impact on the level to which students understand and recall text. When factual types of questions are asked of students, students focused purely on facts as they read. When asked questions that required making connections between pieces of text and preexisting knowledge, students demonstrated this type of behavior while reading (Hansen, 1981). While the literature demonstrates the efficacy of questioning techniques from teacher to student, there exists research demonstrating the effectiveness of teaching students to create questions independently while they are reading to improve their reading comprehension (Berkley, Scruggs, & Mastropieri, 2009; Rosenshine, Meister, & Chapman, 1996; Stokhof, DeVries, Martens, & Bastiaens, 2017). While the strategies in this section are important and have demonstrated usefulness with improving students'

comprehension, the POP of this study is focused on improving adolescents' motivation to read and reading comprehension. Discussion now turns to research literature specifically aimed at this topic.

Increasing the Reading Comprehension of Adolescents

Despite the concerning nature of adolescent reading achievement and high school graduates lack of preparedness to read at a level consistent with the needs of post-secondary schools and the workforce, research suggests that this issue can be improved across content areas in middle and high schools. Kamil et al. (2008) provide four recommendations that can have immediate results with increasing the reading ability of adolescents. Although not an exhaustive list of recommendations, the recommendations presented here have the strongest research support for efficacy and use with adolescents. This is helpful to understanding the POP in this study more clearly, as research is not abundant regarding how to best improve the reading comprehension of adolescents. These recommendations include: (a) providing explicit vocabulary instruction, (b) providing direct and explicit comprehension strategy instruction, (c) providing opportunities for extended discussion of text meaning and interpretation, and (d) increasing student motivation and engagement in literacy learning (Kamil et al., 2008).

Explicit Vocabulary Instruction

When students are learning to read at the elementary level, they typically interact with words in texts that they often use in their daily conversations. As students' progress through middle and high school, however, they begin to encounter words that are novel to them because as students get older, classroom teaching becomes more specific by discipline. Each discipline has its own specialized vocabulary that is used in advanced

texts. As a result, discipline-specific vocabulary instruction is needed to help students understand the complexities of discipline-specific text. Students unknowingly transition from a learning to read instructional approach in their elementary years to a reading to learn approach required at the secondary level without appropriate support.

Explicit vocabulary instruction is the term used to describe a related group of vocabulary strategies. Explicit vocabulary instruction is commonly divided into direct instruction in word meaning and direct instruction in strategies for independent development of word meaning. Direct instruction in determining word meaning involves the teacher assisting students with how to find words in dictionaries, read words and their definitions, orally recite words and their definitions, and use graphic organizers such as semantic maps to make connections among words. Strategies that promote independent vocabulary development include the use of clues (e.g., semantic, syntactic, or context) to arrive at the correct definitions of words through the employment of preexisting knowledge and the context of individual word use (Kamil et al., 2008). Both approaches support the development of students' vocabulary as referenced in various studies examining vocabulary development of students in science and social studies (e.g., Baumann, Edwards, Boland, Olejnik & Kame'enui, 2003).

It is important to note there is not one specific manner of vocabulary delivery that works for all students. For some students, reading and writing activities are most effective for word acquisition, while other students need visual or physical experiences (Kamil et al., 2008). Other studies have demonstrated that collaborative discussions of texts can also assist with vocabulary development. In a study conducted by Barron and Melnik (1973), students who discussed their biology textbook's vocabulary words with

the teacher and each other had a higher rate of recalling word meanings in proper context compared to students who did not engage in the same behavior. Discussion was used by Xin and Reith (2001) as part of an intervention aimed at improving content area vocabulary recall by having students engage in speaking and listening with each other. Through the mental organization of content specific vocabulary and its use in the proper context in discussion with each other, students developed content area vocabulary at a higher rate than students who did not engage in discussion with their peers.

Although research on vocabulary acquisition suggests that explicit teaching practices with students demonstrate positive outcomes, the impact of vocabulary acquisition as it relates to improving reading comprehension scores of students is somewhat mixed. There are an inadequate number of studies related to explicit vocabulary instruction and its impact on reading comprehension implying that more research is needed within content areas to understand the role vocabulary instruction plays in reading comprehension.

Explicit Comprehension Instruction

It is well established in the literature that adolescents have difficulty comprehending their content area textbooks (Biancarosa & Snow, 2006; Chall & Conard, 1991; Kamil, 2003). Hence, teachers need to be working with students to assist them in this task. As stated earlier in this section, a variety of comprehension strategies are available for use by teachers with students (Kamil et al., 2008). In addition, a review of the literature reveals four main ideas regarding instruction that are key for teachers to understand when trying to improve the reading comprehension of students within content areas. These four ideas are: (a) active participation in the comprehension process; (b) the

limitations of reading comprehension skills and strategies; (c) the importance of multiple strategy training; and (d) the delivery of reading comprehension instruction to students.

The effectiveness of skills and strategies as it relates to improving reading comprehension has been discussed at the beginning of this chapter. Students perform a variety of activities across these different skills and strategies included in this discussion with the general acceptance among researchers that these skills improve reading comprehension. A significant commonality found within these different skills and strategies is the active engagement of students with their teachers and peers during the reading comprehension process (Gersten et al., 2001). Studies examining the impact of reading comprehension skills and strategies have predominantly compared one or more skills or strategies against a control group that received whatever method of instruction was happening in that classroom (Butler, Urretia, Buenger, & Hunt, 2010). This has resulted in difficulty making valid conclusions regarding whether one skill or strategy is better than the other to improve students' reading comprehension. Moreover, research comparing the use of different skills or strategies against each other is scant. Due to this shortage of research, teachers must make instructional decisions after reviewing the empirical research that supports their understanding of strategies to best meet the needs of their students (Kamil et al., 2008).

Although it cannot be determined from the research literature that any one skill or strategy is better than another, it can be evidenced that multiple-strategy training for teachers, and subsequent use with students, results in better reading comprehension results. Katims and Harris (1997) found that having students identify the main ideas of text and summarizing those ideas helped students comprehend text better. Hanson and

Pearson's (1983) study of students' ability to connect newly read text with existing knowledge, while concurrently predicting and making inferences from text, resulted in better reading comprehension results for students. The National Reading Panel (2000) also found evidence of similar gains made by students in improving their reading comprehension through the utilization of multiple skills and strategy approaches.

Opportunities for Extended Discussion

As stated earlier, a primary goal at the secondary level is to increase students' abilities to comprehend complex text in different content areas. Comprehension in this regard goes beyond obtaining facts and understanding the literal meaning of text and includes being able to read critically to make interpretations, generalizations, and conclusions independently (Kamil et al., 2008). Extended discussion opportunities provide students with the ability to improve reading comprehension skills through the internalization of cognitive processes employed during discussions of text with teachers and peers. Participating in discussions provides students with a forum to share their individual interpretations of text and be challenged by others who may view the text differently. Students defend their positions on their interpretations and challenge others on their interpretations. Through discussion, students arrive at an agreement on different aspects of the text being investigated and discussed. Teacher facilitation of meaningful activities is key to supporting students to arrive at a place of mutual understanding. These activities must engage students in thinking about what they have read, while at the same time, serve as a model they can reference when reading outside of a group setting (Kamil et al., 2008).

Empirical research to demonstrate the impact of discussions alone on adolescent

reading comprehension is scant. Most often, discussion is grouped with other strategy instruction. As a result, it is difficult to delineate the component that is impacting student comprehension – the discussion, the strategy, or both? There is evidence, however, that suggests discussion-based instructional approaches can improve students' reading comprehension. This evidence is mostly in the form of studies focused on interpreting events in a text or critically analyzing the subject matter of content (Murphy, Soter, Wilkinson, Hennessey, & Alexander, 2009). One example of this type of study took place across 20 schools in five different states (Applebee, Langer, Nystrand, & Gamoran, 2003). The purpose of this vast setting was for researchers to see urban and suburban schools and a variety in pedagogical methods. Through rating scales and questionnaires regarding discussion and discussion time in the classroom, the authors found that on average only 1.7 instructional minutes out of 60 in language arts classes in middle and high schools was devoted to discussion-based pedagogy, with a range from 0 to14 minutes. Classrooms where teachers engaged in more discussion-based practices with students produced higher rates of literacy growth during the school year than classrooms where discussion was rarely used (Applebee et al., 2003).

During discussion-based activity, students are asked to create their own authentic questions about the text they are reading and to seek answers to their questions by selecting material from the text to support their answers. These questions are different from the types of questions seen on standardized tests that are used primarily to test knowledge. Rich discussions in classrooms result from questions that are real and can be answered and supported from multiple viewpoints. Examples of authentic questions might be, "Did the way Jane speak to Tom seem appropriate?" or "What do you think the

author is trying to express to readers?" (Kamil et al., 2008).

Finally, discussions that impact student comprehension feature conversation among teachers and students or among students, where students defend their statements through reasoning or reference to textual information (Reznitskaya, Anderson, & Kuo, 2007; Yeazell, 1982). Langer (2001) conducted a large-scale, nested multi-case investigation of schools, 44 teachers, and 88 classrooms located in urban and suburban areas across four states. Langer was interested in observing the instructional methods used in each classroom and the resulting reading and writing scores of students on standardized tests in each state. Six specific features were consistently observed in high performing classrooms. Of significance for this present study, was the finding that high performing classrooms provided many opportunities for students to work together to "sharpen their understandings of text with, against, and from each other" (Langer, 2001, p.872).

Increasing Student Motivation to Read

Motivation refers to the desire, reason, or predisposition to become involved in an endeavor (Kamil et al., 2008). In this case, the endeavor is reading text. Engagement refers to the level in which students can process text deeply using active strategies, thought processes, and prior knowledge (Kamil et al., 2008). Students can be motivated to complete a reading assignment without being engaged because the text to be read is too easy; however, the opposite is true if the text is too difficult. Research by Graham and Golan (1991) underscores the importance of messages communicated to students from their teachers and how these messages can impact students' learning goals and results.

Student motivation to read declines as students pass from elementary to middle

school, and further still, as students pass into high school (Gottfried, 1985). Struggling readers demonstrate the sharpest decline in motivation to read content area texts (Harter, Whitesell, & Kowalsk, 1992). Teachers often attempt to motivate students by external incentives and reminding students that they will get poor grades if they do not complete the work. This extrinsic method of motivation is disadvantageous. Instead of putting pressure on students to achieve, students perform better when teachers emphasize how much students can remember and understand with grades attached to the discussion (Grolnick & Ryan, 1987). Meta-analyses conducted by Deci, Koestner, and Ryan (1999) and Tang and Hall (1995) demonstrate that extrinsic rewards may show an initial increase in student motivation to read, as well as an openness to learning about different subjects. Extrinsic rewards and avoiding punishment over the long term, however, was found to be more detrimental than the reception of verbal rewards (Deci et al., 1999).

The use of praise to motivate students is important to consider because it impacts their beliefs about intelligence and achievement. According to Dweck (2000), students' theory of intelligence includes fixed or growth mindsets. A fixed mindset (also referred to as an entity theory of intelligence) is the belief that one's intelligence is static and cannot be altered. In contrast, a growth mindset (also known as an incremental theory of intelligence) is the belief that intelligence is not a fixed trait but can be increased and improved through learning and effort. Within schools, teachers most often praise students for their innate intelligence rather than their effort (Cimpian, Arce, Markman, & Dweck, 2007; Mueller & Dweck, 1998), which is problematic because students who are praised solely for their innate intelligence tend to be overly concerned with others' perception of them as smart. These students therefore tend to avoid learning opportunities in which

they may be perceived as not smart (Dweck, 2008; Mueller & Dweck, 1998). Rather than trying to correct a mistake and learn from it, they try to avoid failure by not participating in the activity (Dweck, 2008; Nussbaum & Dweck, 2008). Students who are praised for innate intelligence often see the need for effort as an indication of their own limited intelligence. They take on a goal to perform – to look smart and competent (Blackwell, Trzesnieski, & Dweck, 2007). This finding is alarming as students who hold this belief may stop working in school when learning becomes challenging. Conversely, teachers who praise students for their effort help students understand that the amount of effort they put into learning matters. As a result, students view mistakes and/or gaps in knowledge as opportunities to increase their intelligence through the exertion of effort (Blackwell et al., 2007; Nussbaum & Dweck, 2008).

Like the relationship between fixed and growth mindsets and student achievement (Dweck, 2000), goal orientation has also been found to be a valid predictor of student achievement (Sorensen, 2016). Goal orientation can be defined as a person's disposition toward developing or validating their ability in achievement situations (VandeWalle, 1997). In the context of learning situations, the construct of goal orientation is viewed in two ways: performance-based goal orientation and mastery-based goal orientation (Dweck & Legget, 1988). Students who exhibit performance-based goal orientation are concerned with demonstrating their competence in a learning situation. Students will avoid difficult tasks for fear of failure (Dweck, 2000). They seek easier tasks and are concerned about how their peers view them as students (Dweck & Legget, 1988). Conversely, students who exhibit mastery-based goal orientation are concerned with their improvement related to developing a skill or overcoming a challenge. Students are

intrinsically motivated to master tasks. Students evaluate their current performance against past performance, to determine how close they are to completing the requirements for task completion. Students will continue to work at a task until they have achieved mastery (Dweck & Leggett, 1988, Dweck, 2000).

The teacher plays a significant role in shaping students' mindsets. Moving students toward consistently putting forth effort, using different learning strategies as necessary, and persevering to reach established learning-based goals is critical for students to see that learning is a process (Dweck, 2008). If teachers stress the relationship between ability and achievement, then students will take on a fixed mindset leading to a performance goal. If teachers stress the relationship between effort and achievement, then students will develop a "growth mindset" leading to a goal to learn and master content and disciplinary processes and skills. Emphasis by teachers on exerting effort in the learning process and creating a supportive environment where mistakes are encouraged and explained as opportunities for growth will likely lead to students engaging in developing a learning goal. Consistency within the research literature demonstrates that students with a learning goal are more likely to be more motivated and engaged and have better reading test scores than students with performance goals (Graham & Golan, 1991; Grolnick & Ryan, 1987; Schunk & Pajares, 2002).

Graham and Golan (1991) examined the impact of mindset on student motivation. Students were randomly assigned to one of two conditions. Students in the first condition were told that many people make mistakes at the beginning of a task and become better with practice. Researchers encouraged students to see the task as a challenge and work toward mastery. Students in the second condition were told that people are either good or

not so good at certain tasks and their completion would dictate how good they were. Students in the effort group (first condition) put forward more effort into deep processing of semantic meaning of words and had better memory of the words learned compared to the ability group (second condition).

What can be deduced from Graham and Golan's study is that teacher feedback that underscores the importance of the process, not the initial outcome, is the foundation for eliciting student motivation (Blackwell et al, 2007). This is important to the POP of this study as the act of reading for understanding is a process. Moreover, informational feedback with realistic expectations, the emphasis on effort as the primary driver for performance, clear directed instruction regarding how to apply a reading strategy, and an explanation of when to use a strategy and how to modify it when necessary are critical to helping students improve their reading comprehension skills (Henderlong & Lepper, 2002; Schunk & Rice, 1992). Teachers who employ these actions can help foster a willingness in their students to appropriately apply different reading strategies at correct times and continue to work through difficult text even if not correct the first time.

Effective Comprehension Routines

The strategies discussed thus far can be used alone or in conjunction with other strategies to improve students' reading comprehension. When strategies are grouped together into a singular approach, they are referred to as comprehension routines. While the strategies in the previous section are effective when strong instructional control is present, studies carried out in the late 1970s and early 1980s determined that independently skilled readers needed to bring a variety of single strategies to bear at the same time (Johnston & Afflerbach, 1985; Olson, Mack, & Duffy, 1981; Pressley &

Afflerbach, 1995). This understanding that several cognitive processes were in play during demonstrations of skilled reading led to the development of instructional approaches using a combination of comprehension skills (Brown et al., 1989).

Reciprocal Teaching (RT)

One of the higher profile approaches that has demonstrated efficacy in the creation of skilled readers by utilizing a combination of comprehension strategies is Palinscar and Brown's (1982) Reciprocal Teaching (RT) method. RT is a method of reading instruction in which students gradually assume the role of teacher in small group reading activities. After the teacher models the four steps of RT with students (i.e., predicting, questioning, clarifying, and summarizing), they work with their teacher and each other to develop independent mastery of the four steps of RT. Once the teacher determines that independence has been achieved, students take turns leading each other through the four steps of RT to come to an agreed upon understanding of text.

An early attempt to understand the potential impact of RT was a pilot study that included five seventh-grade teachers in a Midwestern city, who identified 13 students out of 113 as adequate decoders but demonstrated poor comprehension skills (Palinscar & Brown, 1983, p. 9). Of the 13 students identified as subjects for the pilot, four were deemed appropriate to continue and were randomly selected to receive the RT treatment applied by the researchers. Students in this pilot study were not considered as having a documented learning disability but had reading comprehension scores on the Metropolitan Achievement Test that were three years below grade level. Two students received the RT treatment, while the other two students received instruction in Locating Information (LI).

LI involves students reading a passage independently and answering questions from the text with the teacher. Correct responses are praised, and incorrect responses prompts the teacher to send the student back to the portion of text where the answer can be found (Wray, 2004). This treatment took place over a period of 20 days. The two students receiving the RT treatment scored higher on immediate measures of reading comprehension as well as during the maintenance phase of the treatment when they were reading independently, compared to the students who participated in LI. Baseline scores of students on measures of reading comprehension were in the range of 15% prior to both interventions. At the end of both treatments, LI students averaged 50% accuracy on reading comprehension. RT students averaged 82% accuracy on a 10-item multiple choice test.

Beyond the quantitative improvement in reading comprehension scores demonstrated in the pilot study, qualitative changes in students' dialogue was observed as well. At the outset of the pilot study, the researchers encouraged students to ask for assistance in identifying and defining unknown words. Students were not observed doing this until they had experienced the RT treatment. Observations were also made by the researchers regarding students re-reading passages they did not entirely understand. They did not do this until after the explicit modeling of RT was performed by the researchers. It was also observed that students were more engaged in the reading as demonstrated by the increasingly sophisticated nature of the questions students were asking about the text toward the end of the treatment phase without prompting from the researchers (Palinscar & Brown, 1983).

With favorable results demonstrated in the pilot study, Palinscar and Brown sought

to extend their findings with a second study. This study was aimed at recreating the same results as the pilot study with different students. This time, however, a criterion level of 70% was set as the goal for students to achieve at the end of the study. Students received assessment data in graph form to discuss their progress with their teacher. Tests of transfer were also included to see if students could impose the cognitive skills of RT while reading different types of text.

Like the pilot study, middle school teachers in a mid-sized Midwestern city identified 41 students who met the criteria of having adequate decoding skills but poor comprehension skills. Twenty-nine students met the criteria after being evaluated further by the researchers, with 16 being identified as being able to decode at grade level. Six students were randomly selected to participate in the study by the researchers, with another six students being selected to serve as the control group. Again, students were deemed to be at grade level for decoding but 2.5 years behind reading comprehension levels for students in seventh grade. The ten comprehension question assessments that were at the beginning and again at the end of the 20-day intervention period were classified as: (a) text explicit, (b) text implicit, or (c) script implicit, by independent raters. Students were asked factual questions that could be answered directly from the text (text explicit), inferential questions that required deducing the answer after examining various parts of readings (text implicit), and questions that required combining prior knowledge with read text to arrive at an answer (script implicit).

As reported by the researchers, measures of reading comprehension demonstrated improvement similar to the first study. Four of the six students who received RT scored 80% or higher on posttest. One student scored 70% and the final student of the six scored

50% on the posttest. These results demonstrated significant improvement over the baseline high score of 40%. The six students who served as the control group did not improve their baseline scores during the 20 days of the intervention period.

The quality of the six students' questions and discussions generated during the RT period also demonstrated improvement similar to the first study. This portion of the study was overseen by independent observers who noted that assistance provided by teachers at the outset of the RT intervention to assist students with engaging in dialogue, asking clear and detailed questions, and creating detailed summaries also significantly decreased. An added layer of examination regarding dialogue improvements by Palinscar and Brown included two independent raters' examinations of three transcripts of the students in the RT intervention. These transcripts were taken from the beginning, middle, and end of the 20-day treatment period. The transcripts were randomized, and the raters were responsible for ranking the discussions as to whether they were from the beginning, middle, or end of the treatment period. The raters correctly identified the order of the transcripts as follows: (a) 83% (initial), 67% (middle), and 83% (final).

This second study also included "generalization probes" to see what impact the RT treatment would have on students' ability to comprehend discipline specific texts in the regular classroom. Teachers in the participating content areas (social studies and science) chose texts independently that students had not seen before and then administered a similar 10 question test that was being used in the RT experiment. Although the scores were varied, there were percentile improvements ranging from 49 – 76 in social studies and in science. Although, not a primary focus of this study, this information suggests the potential use of RT in the content area classroom to improve

student motivation and reading comprehension.

Having successfully increased student reading comprehension levels of middle school students in two studies, Palinscar and Brown (1982) were curious to know if the RT intervention could be mainstreamed into classrooms by training teachers to administer and lead the RT intervention with students independently in their classrooms. In a third study regarding the use of RT to increase reading comprehension scores of middle school students, Palinscar and Brown (1983) focused on the training of teachers and their implementation of RT in their classrooms to see if they, too, could improve reading comprehension scores of their students.

Teachers received three training sessions prior to beginning the RT intervention with students. In the first session, teachers were introduced to the rationale for RT and results from the pilot study. A video showing the researchers conduct RT with students was also shown to teachers. In the second session, teachers and the researchers practiced the four elements of RT together and discussed questions teachers had about RT. In the third session, teachers and researchers met and practiced the RT intervention with seventh graders not participating in the study. The researchers modeled how to introduce RT to students, modeled the four parts of RT for students, and then allowed the teachers to take ownership of the group. The teachers then implemented the RT strategy in their classrooms. The researchers checked-in weekly to answer any questions the teachers might have and to observe teachers were conducting the RT intervention correctly. Results for the improvement of reading comprehension were similar to the findings of the first two studies (Palinscar & Brown, 1982; 1983).

The Evolution of RT

The initial research regarding the usefulness of RT by Palinscar and Brown (1982; 1983; 1984) prompted a variety of studies by researchers to replicate the findings of the studies described in the previous section. Rosenshine and Meister (1994) evaluated 19 studies designed to improve students' comprehension of text in various settings using the RT treatment. The 19 studies were selected from the ERIC database and Dissertation Abstracts International under the following conditions: RT was explicitly mentioned by the authors, there was a reference to Manzo (1969) made, studies included experimental and control groups, and if students were assigned in a randomized manner to the experimental or control group or determined to be similar at baseline measurement. Study participants ranged in age from 7 years old to adults.

Rosenshine and Meister also noted during their evaluation of the 19 studies that RT diverged into two instructional styles in the reviewed literature: RT Only (RTO) and Explicit Teaching Before RT (ET/RT). Nine of the 19 studies were classified as RTO and the remaining 10 studies were classified as ET/RT. The primary reason for this divergence in approaches is a result of Palinscar and Brown not explicitly stating how they taught the four cognitive strategies to students during the RT intervention (Rosenshine & Meister, 1994). This resulted in interpretation by some researchers regarding how to handle this question prior to their own studies. As a result, ET/RT was born from RTO.

The ET/RT approach provides explicit instruction in the four cognitive strategies of RT before beginning the conversations of the intervention, while RTO provides models, prompts, and hints without explicit teaching of the four cognitive strategies. The researchers of the study did three comparisons of the two approaches to see if one RT

approach was superior to another regarding improvement of reading comprehension. These comparisons were: (a) type of instruction (RTO vs. ET/RT), (b) type of student (average vs. below average) and (c) outcome measures (standardized reading tests vs. experimenter-developed tests). Outcomes of this analysis included ET/RT yielded the highest returns on improving reading comprehension of students, average students demonstrated the highest improvement in their reading comprehension, and researcher-developed tests yielded more significant results than standardized tests.

Other attempts beyond the work of Palinscar and Brown (1982; 1983) sought to demonstrate the utility of using a combination of comprehension strategies to maximize student reading comprehension. A few approaches employed multiple, concurrent strategies with little improvement observed in the comprehension levels of elementary students (Paris & Oka, 1986). Approaches that utilized multiple strategies but included an emphasis on direct teacher explanation and modeling each of the strategies for students were most successful in demonstrating improved rates of reading comprehension (Bereiter & Bird, 1985; Collins, Brown, & Holum, 1991; Duffy et al., 1987). Thus, it can be concluded here that teacher modeling of strategies is an important aspect of their success with students.

Transactional Strategies Instruction (TSI)

The successful use of singular cognitive reading comprehension techniques demonstrated by literacy researchers' in experimental contexts began to be employed in classrooms – most notably elementary classrooms (Brown et al.; 1989). What became apparent, however, was that the development of students' reading comprehension skills was realized using a number of strategies at the same time. In fact, it involved a

transactional series of exercises as described in Rosenblatt's (1978) Transactional Reading Theory (Brown, et al., 1989).

First, students were encouraged to create meaning from text using individual skills and strategies (e.g., think-aloud, summarizing, predicting, clarifying, questioning, story grammar and text structure analysis) that enabled the joining of what they were reading to their prior knowledge. Second, because strategy instruction was introduced in reading groups, students were socially constructing meaning of text together. As a result, the understandings of read texts that were created within the group format were different than what students would have created if reading independently, without the employment of reading comprehension strategies. Third, the actions and reactions of teachers and students working with the groups cannot be identified ahead of time when the group is strategically working to find consensus on interpretations of text. Because the answers of group members are determined in part by the responses of others in the group scenario, a transactional act occurs between members of the group to create meaning of text (Bell, 1968).

The immediate goal of Transactional Strategies Instruction (TSI) is the co-construction of textual meaning by group members using different strategic approaches taught to them by their teachers. The permanent goal is for students to be able to use internalized strategies correctly when they are attempting to make meaning of dense text. Both goals are promoted by teaching students in reading groups to construct the meaning of text through using expert readers' use of comprehension strategies.

Students Achieving Independent Learning (SAIL)

One of the more prominent TSI interventions referenced to demonstrate the

effectiveness of TSI is Students Achieving Independent Learning (SAIL). Similar in nature to RT, teachers use think-aloud and explicit instruction practices to help students learn how and when to use: (a) prediction, (b) visualization, (c) questioning, (d) clarification, (e) associations, and (f) summarization to improve levels of reading comprehension (Duke & Pearson, 2002). SAIL uses different texts that are at or above grade level, thus making students' comprehension experiences challenging in nature and slightly different from reading comprehension programs that focus on students who are at least two grade levels below their peers on measures of reading ability.

An example of SAIL applied in the classroom might include the following: (a) students are asked to make a written prediction of what the book they are about to read is about after looking at the cover; (b) as the teacher begins to read the book, they use the think-aloud strategy at different points of the story; (c) students share reading text out loud while the teacher prompts students to engage the various comprehension strategies as needed; (d) students employ strategies that they have been exposed to in previous readings; and (e) students then evaluate their predictions to see if they were correct (Duke & Pearson, 2002; Lubliner, 2004). The comprehension strategies the teacher might emphasize with students during the SAIL process includes the cognitive strategies of RT, but also: (a) thinking aloud; (b) constructing images; (c) story grammar analysis; and (d) text structure analysis.

SAIL was demonstrated by Brown et al. (1989) to be an effective intervention to improve student comprehension on standardized tests using a quasi-experimental design. Five groups of six second-grade students deemed low-achieving received a year of TSI as described in SAIL. These groups were compared to control groups comprised of five

groups of six low-achieving second-grade students who did not receive TSI as described in SAIL. A subtest of the Stanford Achievement Test that measures reading comprehension was used to obtain pre and posttest scores in the fall and spring, with the SAIL students scoring significantly higher than the non-SAIL students at the end of the study.

Questioning the Author (QtA)

Questioning the Author (QtA) is based on the idea that authors of text make mistakes and that readers should engage with the text through questioning methods to construct textual meaning (Beck, McKeown, Hamilton, & Kucan, 1997). Rather than approach textbooks or other content materials as true and to be taken at face value, students are encouraged to think beyond the text. They learn to ask questions focused on getting to know the motivation of the author, why certain information was included, what was the author's point, what else could have been said, who's voice is missing, what could have been included to help me understand, and what other visuals could have been incorporated to help me understand. The interesting part of QtR is that it underscores the fact that reading comprehension problems with students are not always because the student has poor reading skills. Often, it can be differences between what the author wrote to convey a message and the details missing that make it confusing for the reader (Ogle, Kemp, & McBride, 2007).

The initial study demonstrating the efficacy of QtR took place in a small parochial school with 23 inner-city fourth-grade students. After analyzing transcripts of classroom instruction and videotaped lessons through qualitative analysis, it was found that teacher dominated discussion decreased in quantity but increased in quality with students. It was

noted that more of the teachers' questions were concerned with the construction and extension of meaning with students and emphasizing the use of student-initiated questions and student collaboration to decipher the author's intent. An increase in student comprehension of text was demonstrated by the students who participated in the QtR treatment compared to the control group that did not receive the QtR treatment.

Concept Oriented Reading Instruction (CORI)

The Concept Oriented Reading Instruction (CORI) engagement approach created by Wigfield and Tonks (2004), builds on the singular strategy and mixed-strategies research on improving reading comprehension, through examining the efficacy of reading specific motivational techniques to help students improve their reading comprehension skills through appealing to students' interests. This instructional framework provides a classroom context where multiple strategies are paired with motivational practices to improve reading comprehension. The reading comprehension strategies utilized in the CORI engagement approach include: (a) activating background knowledge, (b) questioning, (c) searching for information, (d) summarizing, (e) organizing graphically, and (e) structuring stories are taught. Employed motivational practices in the CORI engagement approach include: (a) content goals, (b) hands-on activities, (c) student choice, (d) interesting texts, and (e) teacher and peer collaboration in attempting to improve reading comprehension.

The use of the CORI intervention was first demonstrated to be efficacious with third grade students from four schools in a small city located in a mid-Atlantic state participated in the CORI intervention. Eight CORI classrooms and 11 reading strategy classrooms were the participants in the study, along with 19 teachers. Two schools

received the CORI intervention and administered it to all third-grade students for 12 weeks. The other schools and students were exposed to strategic reading strategies. An equivalent groups pretest-posttest design was used to examine the effects of the intervention between the groups that received the CORI intervention and the strategic reading strategies group. CORI students scored higher than the strategic reading strategies group on local text comprehension assessments as well as on measures of standardized tests. Teachers involved in implementing the CORI treatment rated their students significantly more motivated to read compared to the strategic reading strategies group.

In another study regarding the effectiveness of CORI instruction, Guthrie & Klauda (2014) employed a within-subjects experimental design with 11 teachers and 615 7th grade students across four middle schools in a rural public-school district in a mid-Atlantic state. The purpose of this study was to measure the impact of CORI designed language arts instruction inclusive of the motivational supports of choice, importance, collaboration, competence, and cognitive scaffolding on students' comprehension of informational text compared to students receiving traditional instruction. Results from a repeated measures ANOVA that examined the relationship among three informational text comprehension measures for students who received the CORI intervention compared to students who received traditional instruction demonstrated students' reading comprehension scores were higher in the CORI group compared to the traditional instruction group.

Reading Strategy and Routine Use in High Schools

Unfortunately, although the strategies presented thus far have demonstrated

efficacy in a variety of experimental settings, over a long span of time, these strategies have not gained widespread acceptance in high schools. As noted by Moje (2008), several factors have influenced the inclusion of content literacy instruction in secondary classrooms. These factors include the knowledge, values, and cultural beliefs of secondary teachers and students to the structures of secondary schools and the dominance of content area norms discussed in Chapter One (Moje, 2008, p. 98). However, at present, more attention than ever before is focused on literacy proficiency, across content areas, at all grade levels. Although additional research is needed to extend the empirical evidence base for effective adolescent literacy teaching practices and the needs of adolescents, a concurrent need exists regarding rethinking the way professional development (PD) is designed and implemented with teachers (Meijs Prinsen, & de Latt, 2016; Moje, 2010).

Reframing Professional Development

As Meijs Prinsen, and de Laat (2016) state traditional teacher PD commonly consists of prepackaged knowledge that is delivered to teachers in a passive manner by PD "leaders". Common terminology used in this context (e.g., staff training, staff development) connote organizational terminology with little regard for more active terms, such as learning. Webster-Wright (2009) addresses this point in a review regarding the need to alter the current state of PD for teachers. Specifically, Webster-Wright posits current PD approaches "do something to the professional." It is assumed by the education establishment that new knowledge presented to teachers through the delivery of workshops and courses is easily integrated into pedagogical practices. However, this is rarely the case due to teachers' perceptions of PD being fragmented and impractical and lacking clear connection to their content-areas and classrooms (Darling-Hammond,

Chung-Wei, Andree, Richardson, & Orphanos, 2009). Although it is understood that teacher PD will continue to require mandatory trainings regarding different topics and issues, it is also becoming more accepted that PD needs of teachers need to expand to be more inclusive of socialized, on-going, job-embedded professional learning opportunities that directly relate to teachers' work in classrooms (Leiberman & Wood, 2002a).

The theoretical premise for PD grounded in socialized learning practices rests in the work of Lave and Wenger (1991). Based on social constructivist theory, situated learning is comprised of interactive, socialized, and purposeful learning experiences obtained from and applied to everyday situations (Hummel, 1993). From a situated learning perspective, learning is the product of social interactions between people within different contexts that augment prior knowledge and beliefs within a community of learners (Kobett, 2016; Brown et al., 1989). It is Lave and Wenger's (1991) assertion that meaningful learning of new knowledge and skills is less likely to transfer into classrooms when teachers learn in isolation and out of context compared to teachers having opportunities to engage others in conversations in their daily work contexts. Through reflection and engagement with other like-minded adults, individuals become more involved in conversations as they feel comfortable and can assess their existing knowledge about a topic through conversation while also constructing new knowledge within various contexts (Jackson & Temperley, 2007). As a result, these interactions spur the formation of independent and group knowledge among participants and a support structure to implement new knowledge and skills (Wenger, 1998). Moreover, a survey conducted by Lovett and Cameron (2011) the authors reported that 60% of PD considered by teachers as meaningful and informative to their instructional practice came

from conversations with colleagues, students and their families, and their daily work experiences. Further still, teachers learning from each other as a PD strategy has been suggested as a worthwhile approach by several researchers (Dresner & Worley, 2006; Leiberman & Wood, 2002a, 2002b; van Amersfoort, Korenhof, Moolenar, & de Laat, 2011).

The empirical evidence supporting the efficacy of teacher learning through professional communities and networked learning has increased over the past 15 years (Lieberman & Pointer Mace, 2008). Studies conducted by Katz and Earl (2007), Lieberman and Wood (2002a), and O'Brien, Varga-Atkins, Burton, Campbell, & Qualter (2008) suggest that teachers' involvement in professional learning communities as part of a program or project implementation results in meaningful changes to teachers' professional knowledge, teachers' abilities to evaluate solutions to their problems of practice, and teachers' ability to alter their pedagogical practices. Whereas social structures created for teachers to engage in PD together is a promising strategy to engage teachers in meaningful PD, Communities of Practice (CoPs) and Professional Learning Communities (PLCs) are two structures that can be used together to create powerful, socialized PD opportunities for teachers (Meijs Prinsen, & de Laat, 2016).

Communities of practice. Influenced by Lave and Wenger's (1991) examination of apprenticeship as a learning model, CoPs are groups of people who share a concern or a passion for something they do and learn how to do it better through regular interaction (Lave & Wenger, 1991; Wenger-Treyner & Wenger-Treyner, 2015). Whereas apprenticeship learning consists of "learning by doing," CoPs extend this practice to include "learning by doing with others" (Kobett, 2016; Lave & Wenger, 1991; Wenger-

Treyner & Wanger-Treyner, 2015). A CoP is the unique combination of three elements: (a) the domain, (b) the community, and (c) the practice (Wenger-Treyner & Wenger-Treyner, 2015). In schools, CoPs are team or department focused and are voluntary in nature. There is no penalty for teachers if they choose not to participate.

First, CoPs, attain a collective identity through the common domain of interest to its participants. This collective domain of interest is what differentiates members from non-members of a community. Within the membership, there is value placed on competence and learning with and from each other (Fuller, Hodkinson, Hodkinson, & Unwin, 2013; Lave & Wenger, 1991; Wenger-Treyner & Wenger-Treyner, 2015). This continuous interaction undergirds the community aspect of CoPs. In addition to the similar domain interests that unite members of a CoP, members must also be practitioners. Through the collective sharing of experiences from their daily work, members of a CoP share their experiences, stories, tools, solutions to problems, and other practical ideas (Wenger, 2007). Over time and through sustained interactions, CoPs are forged and strengthened through continual participation of its membership (Wenger-Treyner & Wenger-Treyner, 2015).

One manner CoPs can manifest themselves in a school setting is through an instructional coaching model. The role of an instructional coach is to evaluate a teacher's current instructional practices and provide feedback to help that teacher grow (Bryk, Gomez, Grunow, & LeMahieu, 2015). Instructional coaches are not formal evaluators but model best practices and lessons, give teachers a safe environment in which to practice strategies, and give feedback on individual goals to foster improvement. Eventually, the instructional coach fades their support as the teacher becomes increasingly proficient, but

the coach is available to help when needed. Effective instructional coaches not only have deep content and skills knowledge, but are effective relationship builders, empathic listeners, and have the best interests of teachers and students at heart (Tschannen-Moran & Johnson, 2011). Instructional coaches create CoPs with teachers when they share in the lessons, practices, and conversations of the teachers they are supporting (Homan, 2014). Although empirical evidence supporting the relationship between instructional coaching and improved teacher practice and student achievement is scarce, some studies have shown a positive effect (Desimone & Pak, 2016; Gallucci, Van Lare, Yoon, & Boatright, 2010).

In a sequential mixed-methods study Cantrell and Hughes (2008) examined the effect of instructional coaching on teachers' efficacy to implement content literacy practices in 6th and 9th grade classrooms. Twenty-two teachers in 8 schools across a small southeastern state participated in a year-long PD experience with instructional coaching aimed at equipping content area teachers with literacy techniques designed to help students improve reading comprehension. After the initial period of PD informed by an apprenticeship approach to content literacy instruction, instructional coaches visited with teachers twice a month. Teachers completed a 65-item survey at the beginning and end of the year about their personal efficacy related to teaching literacy practices. An observation protocol based on the Global Content Literacy Classroom Implementation construct was used by observers to document teachers' implementation of teaching techniques reviewed during the PD. Teacher surveys were also conducted asking questions such as: (a) "How successful do you think you were in implementing the techniques from the PD?" (b) "What barriers did you encounter as you tried to implement

the content literacy techniques?" and (c) "How well are you equipped now to use literacy techniques in the content area?" Paired sample *t* tests and a two-level coding system was employed to analyze teachers' interview responses, which demonstrated significant increases in their personal efficacy for teaching literacy strategies from the fall to the spring. The researchers noted that teachers often stated that conversations with their instructional coaches and peers were key elements to their increased efficacy.

In a similar study, Panfilio-Padden (2014) examined the influence of instructional coaching on teacher efficacy and student achievement in English language arts at a small mid-western elementary school. Using a convergent mixed methods design, sixth grade teachers received weekly guidance and support in the form of trainings, demonstrations of guided reading lessons, and weekly discussions from a site-based instructional coach over a period of 10 weeks to assist in the implementation of the school's recent adoption of the Mondo reading curriculum. Participants in the study completed the Teachers' Sense of Efficacy Scale during the first and tenth weeks of the intervention to identify any changes to teacher's self efficacy. Participants also completed a one-on-one interview regarding the culture of the school, knowledge and understanding of instructional coaching, and personal feelings about pedagogical knowledge and instructional practice related to reading instruction at the beginning and end of the 10-week intervention period. Achievement data for 175 students were also collected from the 3/5 Reading Record and the Retell/Recall/Comprehension Scoring Sheet from the Mondo reading assessments. A Wilcoxon Signed-Rank Test was run to compare the pretest and posttest scores of the Teachers' Sense of Efficacy Scale. Although there was an increase in self efficacy in 5 out of 6 participants, the increases and decreases analyzed were not considered

statistically significant. However, all participants indicated feeling more self-assured and confident in their delivery of the Mondo curriculum because of working with their peers and instructional coach. Finally, a paired samples *t* test was conducted to analyze the differences between the pretest and posttest means of students before and after the Mondo intervention. A statistically significant difference was found between the means.

Professional learning communities. Whereas CoPs are driven by members of similar interests and passions and aimed at individual improvement, PLCs are dictated by goals and objectives created by leadership that seek to continually improve the professional culture and climate of an organization. PLCs provide a macro approach (i.e., mandatory faculty involvement) to organizational improvement, versus a micro approach (i.e., faculty choose to participate) found in CoPs (Blankenship & Ruona, 2007). Within a school setting, the macro approach that PLCs support often focus on schoolwide initiatives such as promoting positive behaviors among students, increasing standardized test scores, or other areas deemed to need improvement by school administration. As noted by DuFour and Eaker (1998) PLCs are comprised of six characteristics: (a) shared mission and values, (b) collective inquiry, (c) collaborative teams, (d) action orientation and experimentation, (e) continuous improvement, and (f) results-oriented. In addition, PLCs stress the important role that administrators, parents, and community have in establishing school improvement goals.

Several studies support the notion that PLCs can increase student achievement (Smith, Ralson, & Naegle, 2016). A study conducted by Strahan (2003) examined the increased achievement gains of three schools with a student population comprised mostly of minority students from low-socioeconomic households. Over a five-year period,

proficiency in reading and math grew from less than 50% in year one to over 75% in year five. Qualitative data were collected in the form of interviews, lesson observations, and school-wide meetings. The results of the analysis led to the conclusion that "data driven dialogue, purposeful conversations guided by formal assessment and informal observation" (Strahan, 2003, p. 143) embedded in PLCs were the primary reason for students' rise in achievement.

A more recent study conducted by Williams, Brien, and LeBlanc (2012), had similar results as Strahan's study regarding the positive impact of PLCs on student achievement. Williams examined the usefulness of PLCs at the elementary, middle, and high school levels in a suburban school district. Interviews with teachers across all grade levels yielded a finding that PLCs were effective in helping teachers positively augment their instructional practices. An analysis of student achievement data in reading across all grades yielded a statistically significant improvement at all levels. Interestingly, the most impressive gains were observed at the middle and high school levels. Like the Williams and colleagues' study, DuFour (2014) reported results of a study conducted in a school district comprised of 27 schools that adopted PLCs. In year one of the PLC initiative 75% or less of all students were proficient in reading and math. By year five, DuFour reported 19 of the schools were at 90% proficient, and the remaining schools met or exceeded 95% proficient in reading and mathematics.

Professional Development in Secondary Schools

Beyond the potential effectiveness of CoPs and PLCs as methods to improve teacher practice and student achievement, further investigation of the research literature revealed other key aspects of meaningful PD. Slavin, Cheung, Groff, and Lake (2008)

shared findings of the most useful routines for improving the reading achievement of students in grades 6-12. They noted that "instructional process programs (methods focused on providing teachers with extensive PD to implement specific skills or routines) had higher positive achievement outcomes" than reviewed approaches without a PD component (Slavin et al., 2008, p. 291). The manner within which PD is delivered, however, is critically important if teachers are going to "buy in" and truly alter their teaching practices. As stated in Chapter One, teachers in the 9th grade FYE course indicated a lack of satisfaction with one-day PD workshops. The lack of satisfaction stems from the short time spent on a topic in one-day presentations that often leaves teachers with more questions than answers due to inadequate implementation support during the year. Based on a review of CoPs and PLCs in the previous section the feelings expressed by FYE teachers are supported by the literature. Further, a review of the research literature on effective PD practices conducted by Gulamhussein (2013) highlights that a lack of implementation support for a new initiative is commonly expressed by teachers across the country. Gulamhussein's findings in 2013 are noteworthy as a study by Yoon, Duncan, Lee, Scarloss, and Shapley (2007) suggests substantial support beyond an initial PD workshop is essential for successful implementation.

Related to the previous discussion, Yoon et al. examined 1,300 PD studies and found that PD initiatives and programs that had the most meaningful impact on teachers' instructional practices were long in duration and embedded in teachers' everyday work in the classroom. PD activities that were less than 14 hours in duration did not impact student learning or change classroom teaching practices. Further, only 10 percent of

teachers can transfer the skill into their classroom practice (Gulamhussein, 2013). On average, teachers need 20 episodes of practicing a new skill to correctly implement it in their classrooms (Joyce & Showers, 1982). In some instances, it may take between 50 - 80 hours of instruction, practice, and coaching for a new instructional approach to be correctly mastered and used in the classroom (Yoon et al., 2007).

Providing teachers with on-going PD to learn research-based strategies for recognizing literacy instruction within individual content areas is also important. This PD must assist teachers in understanding the literacy demands that their content area text places upon students, as well as that students need to be supported by their content area teachers to engage in content area text (Coe, 2014). Without content area literacy instruction, students will continue to struggle in their quest to access the key principles and concepts of content courses necessary to attain the deep level of understanding they are expected to acquire (Metzler, 2001). Within this PD, attention needs to be paid to issues of cultural learning and differences, and most importantly, the role teachers play in motivating their students to engage in the act of reading (Moje, 2010). Discussion will now turn to five empirically based principles highlighted by Gulamhussein (2013) that must be considered for my intervention to have the highest possible chance of being implemented correctly.

As already mentioned, PD must be longer than one or two days and include ample opportunities for follow-up. To have the greatest impact on teacher practice and student learning, PD should include time for teachers to: (a) learn the skill, (b) practice the skill, (c) and have support while they implement the skill in the classroom (Gulamhussein, 2013).

For teachers to commit to using a new skill or strategy within their classrooms, they need ongoing support from an expert to help them work through implementation challenges. This was referenced in the CoP and PLC discussion. Teachers undoubtedly will face obstacles in the implementation of any new skill or strategy in their classrooms (Gulamhussein, 2013). Without the support of a colleague to provide coaching and support, teachers typically abandon trying to change their teaching practice (Knight & Cornett, 2009; Truesdale, 2003). A three-year descriptive survey analysis conducted by Akiba and Liang (2016) examined 467 middle school mathematics teachers' responses over a three-year period on the Teachers' Opportunity to Learn survey. This survey focused on what types of PD (i.e., standard PD, teacher collaboration, university coursework, professional conferences, informal communication, and individual learning) best impact teachers' ability to improve student achievement. Findings of the study included student achievement growth rates were most positively associated with the frequency of teacher collaboration, professional conferences, and communications with colleagues.

The field of andragogy (Knowles, 1976) informs us that adults have different learning needs than children; however, there are similarities between the two groups (McDonough, 2013). Adults need to be active and involved in their exposure and internalization of new research, theories, or skills. Some of the activities that have demonstrated utility for teachers to be active participants in PD activities include: (a) readings, (b) role-playing, (c) open-ended discussions, real-time modeling, and (d) visits to classrooms to see the method under examination in action (Gulamhussein, 2013). Doppelt, Schunn, Silk, Mehalik, Reynolds, & Ward (2009) conducted a two-year quasi-

experimental study in a mid-sized urban school district that sought to examine the impact of content-based collaborative inquiry sessions as PD support for the implementation of a new 8th grade science curriculum focused on electronics. Three groups of teachers were contrasted: (a) teachers who used the established curriculum (n =5), (b) teachers who implemented the new curriculum without PD (n =5), and (c) teachers who implemented the new curriculum with PD (n =13). Teachers involved in the PD engaged in activities similar to those that their students would experience, attended workshops with the curriculum designers, and met regularly with each other to discuss instructional materials and solve questions that arose during the trainings and implementation in the classroom. Students whose teachers participated in the PD achieved one standard deviation higher than the other two groups on end of unit assessments than students who teachers did not participate in the PD. During interviews, teachers commented on the importance of the active nature of the PD experiences and the opportunity to form a collaborative community of practice as keys to their successful implementation.

RT as an Intervention Improve Adolescent Reading Comprehension and Motivation

As previously discussed, RT is an instructional approach that employs four independent strategies to assist in the development of reading comprehension and motivation skills in students ranging from first-grade to adulthood (Ismail, Ahmadi, & Gilakjani, 2012). Through teacher modeling and guided practice, the four strategies of RT (i.e., summarizing, questioning, clarifying, predicting) are introduced and explained by the teacher, followed by scaffolding opportunities between the teacher and students or among students, prior to independent practice being measured (Duke & Pearson, 2002; Oczkus, 2017; Palinscar & Brown, 1982). Within the FYE, investigating the use of RT as

a method to improve students' motivation to read content area text, as well as improve reading comprehension makes sense, as it is a strategy that incorporates many of the significant findings highlighted in the needs assessment. These findings include, in part, a socialized manner of learning between teachers and students and among students and instruction that is based on a variety of interpersonal techniques such as whole and guided reading groups, as well as literature circles. Studies conducted by several researchers have demonstrated RT's ability to improve short and long-term improvement of reading comprehension through metacognitive awareness in students across a range ages and ability levels (Oczkus, 2010, 2013; Palinscar & Brown, 1984, 1986; Rosenshine & Meister, 1994). Research regarding RT's ability to improve reading motivation is less prevalent but suggests RT is a plausible strategy to enhance student motivation to engage with various types of text (Ismail et al., 2012).

Another benefit to using RT with FYE students is that it can be effective in the development of Close Reading Skills mentioned in the CCSS (National Governors Association, 2010; Oczkus, 2017). Close Reading Skills provide students with the ability to develop an organic understanding of the purpose for reading specific text. Through examination of words and ideas used by an author to convey his or her thoughts about a subject, students gain stronger insight into the author's thinking (Dakin, 2013). This improves students' reading comprehension. The four strategies associated with RT have shown to be effective with all types of texts and highly effective with informational texts (Oczkus, 2017). The features of RT that include discussion also meet the CCSS's requirements for listening and speaking; the CCSS mentions students preparing for conversations and collaborative discussions, while taking on different roles in discussions

(Oczkus, 2017). The CCSS also suggests the use of textual evidence to be used by students when asking and answering questions, as well as discussing the intended theme of a text.

The main elements of RT meet these expectations in a variety of ways through the employment of the (a) predicting, (b) questioning, (c) clarifying, and (d) summarizing strategies that comprise this technique. As Oczkus (2017) informs us, these strategies are purposefully introduced to students by teachers in a particular order.

Prediction

After providing students with text, teachers lead students through the strategy of prediction, the first strategy in the RT routine. Predicting is a manner of previewing text to anticipate what may happen next. The teacher will ask students to look at different features of the text and examine titles, subheadings, illustrations, captions, tables, and other clues that allow students to make predictions about the current passage and what may happen next. Graphic organizers, story maps, and/or Venn diagrams might be used to help students organize their thoughts. This allows students to set a purpose for reading and to monitor their understanding. Through prediction, students interact with the text increasing the likelihood that they will be interested in the reading material while improving their understanding (Fielding, Anderson, & Pearson, 1990; Hansen, 1981; Oczkus, 2017).

Questioning

After the prediction strategy is used to prime students' thinking about what the text is about, teachers lead students through a training period of creating and answering questions. Teachers model question formulation by creating questions that seek to

highlight the main points of the text, as well as engender discussions among students. These questions can be directly answered or inferred from statements in the text, while the discussion questions are saved for last as they incorporate information uncovered by questions about the main ideas of the text. Students then follow their teacher's examples and ask their own factual, inferential, and discussion questions. Students' comprehension of text can improve when they are taught to ask good questions by their teachers and when they assume the role of the teacher during the questioning phase of RT (Armbruster, Lehr, & Osborn, 2006; Oczkus, 2017).

Clarifying

After the questioning portion of RT is conducted, the teacher moves students to clarifying their understanding of text. There are two steps involved in the clarifying process: student identification of a word or idea they are struggling to understand and then how to remediate the situation (Oczkus, 2009; 2017). Teachers model how to figure out the meanings of difficult words and then ask students to share strategies they use to figure out difficult words. Sometimes teachers will employ word chunking and discuss the context around the word in question. Getting students to participate in identifying problematic words and working through the meanings is easier than getting students to recognize and communicate sentences, passages, or chapters that make little sense to them. Teachers model "fix-up" strategies to help students construct appropriate meaning when students are struggling to find the main ideas in text. There are many sentence prompts that teachers can use to model how to express a lack of clear understanding about the main ideas in text. Students are then asked to create their own sentences about what they do not understand. Clarifying makes understanding problematic areas of text

more explicit for students, but also makes them more comfortable because all students are asking clarifying questions or making statements seeking clarification (Oczkus, 2010; 2017).

Summarizing

The final step of RT is summarizing. This is a complex process for students to master as it requires using a variety of skills in a correct order. The recollection of important points and details, ordering events in text, and using synonyms or other vocabulary are required during the summarization process. During the summarization process teachers model various summarizing strategies. Verbal summaries, dramatizations, storyboarding, and the use of sequential prompts all can be enacted to help students summarize text effectively (Oczkus, 2010). Teachers then work with students as they take turns modeling summarizing strategies. The employment of summarization strategies allows students to create an overall understanding of text being read in class. In RT lessons, students also have the added opportunities to watch and listen to how other students construct their summaries, which allows them to become more proficient readers (Duke & Pearson, 2002; Oczkus, 2017; Rinehart, Stahl, & Erickson, 1986; Taylor, 1982).

Reciprocal Teaching and Motivation

At present, it is well regarded in the educational field that motivation and reading achievement are connected to positive reading comprehension outcomes. However, the absence of empirical evidence supporting this fact is well documented in the literature (Edmunds & Bauserman, 2006). Most notably, this circumstance was highlighted by the National Reading Panel (NRP) in their report published in 2000. Since that time, research

regarding the role of motivation in reading comprehension and achievement has slowly grown, with research being more prevalent at the elementary grades than the secondary grades (Gutner, 2011).

Teaching Strategies and Motivation

Not long after the NRP's (2000) report came out regarding a lack of empirical evidence regarding motivation and reading comprehension, Guthrie and Cox (2001) examined reading engagement and its impact on students' motivation. As previously discussed, the CORI method developed by Guthrie and Cox (2001) sought to examine the relationship between active learning experiences and students' motivation to engage in reading science texts in fifth grade. One classroom of 28 students received CORI instruction, while another classroom did not receive CORI instruction. The Motivation for Reading Questionnaire (MRQ) was utilized with both groups of students prior to and at the end of the study. Students in the CORI treatment displayed evidence of being more curious, involved in their reading work, selected more challenging texts to read, and engaged in more social interactions with their peers about what they were reading compared to the control group. The CORI group also demonstrated higher rates of reading comprehension, interpretation, and locating information than the control group.

In a follow-up study, Wigfield, Guthrie, Tonks, and Perencevich (2004) trained teachers how to embed CORI within their science curriculum while other teachers received generic reading comprehension instruction. Eight classrooms of students received the CORI instruction and 11 classrooms received generic reading instruction. A comparison of pretest and posttest assessments to measure reading comprehension and motivation yielded statistically significant results in the areas of intrinsic motivation due

to curiosity and challenge compared to the generic strategies groups, which did not yield statistically significant findings between the experimental and control groups (Wigfield et al., 2004).

Findings like those of Guthrie and Wigfield (2000) and Wigfield et al., (2004) were reported by Aarnoutse and Schellings in a 2003 study conducted in the Netherlands. Fourteen classroom teachers and 427 third-grade students participated in a study to examine the use of specific reading strategies and reading motivation techniques in 6 classrooms, compared to 8 classrooms that used neither specific reading strategies nor reading motivation techniques with students. Students completed pretests and posttests in the areas of reading comprehension, reading strategy, and motivation to read. At the end of the 12-week intervention period, the researchers found that targeted instruction of specific reading strategies yielded no significant difference in reading comprehension achievement but an increase in students' motivation to read was realized.

Student Choice and Interest in Motivation

Although the previous studies highlight the role of the teacher in the motivation process, other research has examined the impact of student choice and interest on students' motivation to read. Gambrell, Palmer, Codling, and Mazzoni's (1996) Motivation to Read Profile (MRP) was administered to 330 third and fifth-grade students across 4 schools and 2 school districts. Within the MRP, a reading survey to measure students' self-concept as a reader and how much reading meant to them was combined with a variety of open-ended questions asked orally by researchers regarding students' reading tendencies and what they liked to read. A comparison of students' standardized

reading achievement scores and their MRP mean scores showed a positive correlation between students' reading achievement and their self-conceptions as readers.

In a similar study examining the role of student choice and students' motivation to read, Edmunds and Bauserman (2006), interviewed 91 fourth-grade students at a mid-sized urban elementary school in the southern United States about their reading choices. The researchers used the conversational portion of the MRP, which consisted of 14 questions concerned with the reading of narrative text, expository text, and general reading. The responses to the 14 questions were organized and analyzed using Glaser and Strauss's (1967) constant comparative method. It was revealed from the different groupings and categorizations of students' answers that they were most motivated to read when they could select books based on personal interest. If students had to read something that was not of significant personal interest, they indicated that they would still be motivated to read if they had selections to choose from as prepared by their teachers. Finally, if students knew a conversation was going to be had about what they were reading with their teachers, family members, or peers, they were also highly motivated to read. An interesting finding in the study was that of the students most frequently talked with researchers about the books they personally selected. Students indicated these books had personal meaning for them and that they liked books they could learn something from; thus, it was concluded that expository text is just as important as narrative text when providing students choice in reading materials. Finally, students indicated how they liked to talk about what they were reading with their teachers, family, and friends.

Adolescent Motivation to Read

As has been documented throughout this POP, engaging secondary students to participate in content area reading is difficult. It is an area that is not well researched as demonstrated by a void in the research literature. However, researchers have started to examine adolescent reading motivation to help better understand this issue. Utilizing the MRP developed by Gambrel et al. (1996) the Adolescent Motivation to Read Profile (AMRP) was developed by Pitcher et al. (2007) to help secondary teachers assess the motivational needs of their students. The work of Pitcher et al. is based on the premise that different questions must be asked of adolescents when it comes to their motivation to read compared to elementary students. Revised elements of the AMRP included asking students about their reading of electronic medium, schoolwork and projects students enjoy, and what students read on their own time. Eleven researchers across the United States and the Caribbean administered the AMRP to 384 students and the interview portion to 100 students. The survey provides scores for students "self-concept as a reader" and "value of reading." The survey takes 10 minutes to complete and is a multiple-choice format with scoring sheet. There are also follow-up questions researchers can choose to ask students.

Females valued reading more than males and were more motivated to read than their male counterparts. Boys' motivational levels to read were higher when they were younger but waned as they got older. An important finding that resulted from the qualitative portion of the AMRP was that students read a variety of things outside of school often that are usually electronic in nature or given to them by family members or friends. However, the most interesting findings related to the current study is that students indicated that literature circles, sustained silent reading time, and being given

choice as to what to read was highly motivational, as was teacher modeling of comprehension strategies. These findings hold implications for this POP investigation as much of what was revealed in the needs assessment study in Chapter Two regarding what students indicated would be motivational to engage in content area reading are like the findings of the AMRP.

Limitations of RT

Although research suggests that the use of RT is a bona fide reading strategy, challenges do exist. Although students make impressive gains in their reading comprehension abilities, the process is not as effective for students with decoding difficulties (Hashey & Connors, 2003). Students who are not able to decode or break words down into phonemes and then blend them enough to recognize and say most of the words in the reading passages correctly, could feel uncomfortable or embarrassed when working in a cooperative group involved in this instructional method. However, this could also be viewed as a strength as stronger readers may support struggling readers within the RT exercise. Additionally, it is possible that parts of the RT framework could be used in isolation to assist struggling readers in noted areas of deficiency.

For example, one strategy that has been devised to augment traditional RT instruction for readers who struggle with decoding and comprehending text at grade level is referred to as tape-assisted RT (LeFevre, Moore, & Wilkinson, 2003). Tape-assisted RT involves listening to the reading of a text while following along with the printed text. The results of two single-subject research design studies suggested that students who do not decode well displayed improvement in the use of cognitive and metacognitive strategies and improved comprehension as measured by researcher developed and

standardized tests (LeFevre et al., 2003).

An often overlooked but significant challenge to RT is the strong reliance on the teacher's belief in social constructivist learning and their proficiency with the RT process (Hacker & Tenet, 2002). RT is a method aligned with social constructivist principles of teaching. The basis of this method is that students will draw their own meanings from what they read based on their understanding of the text combined with their prior experiences. A teacher who does not support social constructivist principles may not be open to teaching using this method (Hacker & Tenent, 2002).

Additionally, teachers who do support the process and want to use RT strategies need to be trained and have support when they encounter situations that require modifications (Hacker & Tenet, 2002). The teacher must be able to demonstrate the strategies, gradually give over leadership of the lessons to the students, and then become a facilitator for the student groups. The provision of appropriate PD for teachers is crucial in the successful implementation of RT.

Conclusion

As the research literature has revealed, the nature of examining and understanding empirical research focused on reading comprehension is steeped in sociocultural learning principles. Rosenblatt's (1978) Transactional Reading Theory and Pearson and Gallagher's (1983) "Gradual Release of Responsibility" model serve as the framework researchers have used to develop the reading strategies discussed in this chapter. The early research into the usefulness of these reading strategies has evolved into the creation and study of sophisticated multi-step techniques aimed at improving students' reading comprehension. Although the research literature reveals that these strategies and

techniques hold promise in improving students' reading comprehension, the research literature also reveals student motivation to read and the design and execution of appropriate teacher PD is critical if student achievement gains are to be realized. Considering these three factors, discussion now turns to a proposed intervention to increase student reading comprehension at the secondary level that will broaden the current empirical research in this area.

The insertion of a specific reading technique in the secondary classroom (in this case grade 9 World History) might support both teachers and students who struggle with content area reading. In the case of teachers, they will be empowered through PD to employ RT in their classrooms as they work with students to comprehend selected textbook readings and motivate them to engage in reading primary source documents because of their social interactions within the classroom. While there are many different facets in explaining the lackluster reading performance of secondary students both within the context of this study's POP and globally, more research has been called for within the literature by several researchers that aim to understand and remedy this problem within content area areas.

Chapter Four

Intervention Design: Method and Procedure

As the needs assessment study and intervention literature revealed, FYE students' in this small, suburban New England high school might benefit from participating in teacher-and peer-supported learning activities involving social interaction aimed at increasing students' motivation to read and comprehend content area text. In response to this finding, the intervention for this study involved the implementation of a PD program for teachers that could be implemented in classrooms immediately. The intervention provided teachers with a multi-session PD experience intended to increase their instructional self efficacy, instructional beliefs, and perceived ability to implement RT instruction with grade 9, college preparatory social studies students. This study sought to expand the empirical evidence lacking in existing research literature regarding promising literacy practices (in this case RT) in secondary social studies classrooms.

Purpose of Study

This study examined the effects of a school-based PD program on teachers' abilities to implement RT in freshman, college preparatory, social studies classrooms. This research study tested the hypothesis that secondary social studies teachers who participated in the RT intervention would report increased instructional self efficacy, instructional beliefs, and perceived ability to implementing literacy instruction at the conclusion of the intervention period. It was also hypothesized that in the short-term, teachers' increased efficacy, instructional beliefs, and perceived ability to implement literacy instruction would lead to increased and effective use of the RT intervention, leading to increases in student motivation and reading comprehension achievement in

freshmen social studies classrooms. The predicted short-term outcomes of implementing RT in grade 9 social studies classrooms will result in the intermediate outcome of RT adoption across the social studies department in grades 9-12. The long-term outcome of RT adoption in social studies classrooms suggests the use of RT in classrooms across all content areas 9-12. The proposed research questions for this study addressed process and outcome evaluation. The research questions included:

RQ1: What was the delivered PD and to what extent was it implemented with fidelity?

RQ2: What were teachers' experiences related to completing RT PD?

RQ3: What were teachers' experiences related to implementing RT in their classrooms?

RQ4: What were the participants' instructional self efficacy, instructional beliefs, and perceived ability to implementing literacy instruction within social studies instruction following the intervention?

RQ5: How did students use the four components of RT in groups after the teacher implementation period?

RQ6: What were the effects of RT on students' reading comprehension and motivation to read social studies text?

Research Design

A mixed methods explanatory sequential design was enacted in this study to answer the research questions. As referenced by Johnson and Onwuegbuzie (2004), mixed methods research is the third research paradigm in educational research. Mixed methods research uses elements of quantitative and qualitative research, either equally or

in portions, to augment findings from either a purely qualitative or quantitative study alone (Creswell & Plano Clark, 2011). Specifically, the researcher employed a variant of the explanatory sequential design known as a follow-up explanations variant. In a follow-up explanations variant study, "the researcher places the priority on the quantitative phase and uses the subsequent qualitative phase to help explain the quantitative results" (Creswell & Plano Clark, 2011, p. 85).

The mixed methods explanatory design approach supported the goal of this study by placing context around numerical findings from survey instruments through interviews of FYE teachers and students. Data from survey instruments and interviews regarding teacher efficacy, instructional beliefs, perceived ability to implement literacy instruction, student motivational levels, and student comprehension scores offered insight into understanding the effects of the RT intervention. As the topic of adolescent reading is an emerging territory for empirical researchers, a mixed methods approach created a more complete picture to inform theory and practice related to literacy instruction in high school social studies classrooms.

To avoid potential coercion, a trained observer assisted the researcher with aspects of this study. The trained observer was the English Department Chair (EDC) at the study site. The EDC had no supervisory or instructional authority over teachers or students involved in this study. The EDC recently completed her doctorate from Lesley University and was human subjects certified through the National Institute of Health. The EDC volunteered to assist the researcher when Department Chairs were asked for volunteers to assist with data collection. The EDC's role was to assist the researcher monitor the implementation and use of the RT strategy by teachers and students during

the intervention period and collect data. The researcher administered pretests, posttests, and surveys, and conducted interviews with teachers and students before, during, and after the intervention period.

The Logic Model that guided the intervention design is in Appendix F. Illustrated in the Logic Model are program inputs, outputs regarding activities and required participation, outcomes (e.g., short, medium, and long-term), and assumptions and external factors. The Research Matrix for this study is located in Appendix G. The following section outlines the program evaluation plan.

Program Evaluation Plan

Rossi, Lipsey, and Freeman (2004) discussed the importance of assessing the theoretical approach taken to devise and implement an intervention for a recognized problem. If aspects of the intervention plan are faulty, the intervention will fail no matter how it is designed and implemented (Rossi et al., 2004). First, a process evaluation was completed to examine the implementation of the RT PD program as well as the teachers' implementation of the RT intervention in their classrooms. Second, an outcome evaluation was conducted to assess the extent to which the construction and implementation of the RT intervention achieved the goals for the study (Rossi et al., 2004).

Process Evaluation

The completion of a process evaluation is the most frequent form of program evaluation and provides "quality assurance information" (Rossi et al., 2004, pg. 57). It allows researchers to glean information regarding the structure of the program and how to improve the structure of different aspects of the program in subsequent trials. Participants

also have an opportunity to lend their insights and opinions from their personal experiences to inform researchers of improvements in program delivery that might be useful in future administrations. The formative and summative feedback embedded in the process evaluation plan generated useful information for improved design and delivery of the RT intervention. Thus, the process evaluation plan focused on understanding the support teachers and students received; fidelity of implementation of the program; teachers' and students' experiences before, during, and after the RT intervention; and aspects of the RT intervention that may need improvement, as reflected by Rossi et al. (2004). The process evaluation plan for this study was comprised of three components: (a) context, (b) program implementation, and (c) initial use and process use.

First, context denotes the unique aspects of the environment in which the RT intervention occurred, including relevant social and/or economic elements impacting its implementation (Baranowski & Stables, 2000; Linnan & Steckler, 2002). In this study, the context was a small, suburban New England high school. Most students were White and from middle class homes. Second, program implementation included the following: (a) reach (the number of teachers who participated in the RT PD), (b) dose (amount of RT PD sessions scheduled), (c) dose received (teacher involvement, participation, and receptivity to RT PD) and (d) fidelity (the extent to which the RT PD was implemented as planned with teachers). Each of these components are outlined by Linnan and Steckler (2002). Third, initial use and process use components demonstrated the extent to which teachers adhered to the RT intervention in their classrooms during implementation with students, and the identification of any moderating variables, which have been framed in the literature (Baranowski & Stables, 2000). Each of these elements provided insightful

formative feedback regarding the implementation of the RT intervention. A variety of instruments were used in the study. These instruments included pretests and posttests, preintervention and postintervention surveys, interview protocols, and observational field notes that captured the process evaluation components. These data sources were used together to provide evidence of the implementation process of the RT intervention.

Outcome Evaluation

In addition to conducting a thorough process evaluation, it is equally important to conduct a thorough outcome evaluation. Outcome evaluations are important as they assist in the identification of any changes noted in participants because of the RT intervention (Rossi et al., 2004). It was expected that valuable information would be gathered regarding the degree to which the RT intervention influenced teachers' self efficacy, instructional beliefs, and perceived ability to implement literacy instruction in their classrooms, students' motivation to read content-specific material, and students' reading comprehension scores within his or her social studies classroom. The Logic Model (see Appendix F) for this study highlights outcomes related to the evaluation plan.

The short-term goals of the RT intervention included teachers completing PD regarding the RT intervention, employment of the RT intervention with students, and noting possible changes in teachers' levels of self efficacy, instructional beliefs, and perceived ability to implement RT in social studies classrooms. Higher levels of student motivation to engage in reading social studies text and increased reading comprehension scores of students were additional short-term goals for this study. Intermediate outcomes of the RT intervention include using RT across all freshman social studies classrooms and grade levels with continued evaluation of teachers' self efficacy, instructional beliefs,

and perceived ability to implement literacy instruction, students' motivational levels to read content text, and the observation of higher reading comprehension scores by social studies teachers. The long-term goal of this intervention is for RT to be used across all content areas for the purposes described in this study. The outcomes selected for the evaluation and Theory of Treatment (see Appendix H) were derived from the literature on PD best practices and the current state of adolescent literacy achievement on local, state, and national levels. The outcome evaluation plan discussed herein measured the degree to which the RT intervention impacted teacher self efficacy, instructional beliefs, and perceived ability to implement RT, student motivation to engage in reading content text, and student reading comprehension achievement in social studies.

Method

This section describes the participant characteristics, explains the measures of the study, and reviews the procedure, including a description of the RT intervention, data collection, and data analysis. Following a mixed methods explanatory approach, quantitative data were collected prior to and following the intervention period using pretests and posttests, preintervention and postintervention surveys, and interviews to respond to the research questions for this study.

Participants

There were two participant groups for this study. The first group of participants included 8 freshman social studies teachers (3 males and 5 females). The teachers' years of experience ranged between 2 – 23 years. Each teacher held a Master of Arts degree in social studies education. One teacher elected not to continue on to the implementation portion of the study citing feeling overwhelmed with a newborn at home and caring for

an ill parent as her rationale. She stated her full attention could not be devoted to implementing the RT intervention with fidelity with her students.

The second participant group included 98 (45 males and 43 females) 9th grade students enrolled in World History. The average age for students was 13-14 years old. A review of students' educational records revealed 9 males and 4 females had active Individualized Education Plans (IEPs). Examples of specific disabilities noted in students' IEPs included: (a) hearing, (b) physical, (c) emotional, and (d) health; however, no specific learning disability for reading was revealed after a review of each IEP.

Measures and Instruments

This section describes the process and outcome evaluation instrumentation. The Research Matrix (see Appendix G) provides a detailed illustration regarding the alignment of teacher-level and student-level measures used in this study.

Demographic surveys. Demographic surveys were administered to participating teachers (see Appendix I) and students (see Appendix J) to identify moderating variables of the two participating groups. The following demographic information was collected for purposes of describing the sample: (a) age, (b) gender, (c) years teaching at present school, (d) years teaching overall, (e) grade levels taught, and (f) number of literacy trainings completed. For participating students, the following moderating variables were surveyed: (a) age, (b) gender, and (c) number of years in present school system.

Process evaluation indicators. Process evaluation indicators were created to measure the intervention implementation, including participants' perceptions of the intervention. These indicators provided information regarding the three primary features of the evaluation context: (a) the purpose of the evaluation, (b) the accompanying

structure and unique circumstances of the intervention, and (c) the available resources to implement the intervention (Rossi et al., 2004). As described by Rossi and colleagues, feedback from participants was used to evaluate the program's services and make improvements as necessary. The instruments are listed below in order of appearance on the Research Matrix (see Appendix G).

Reciprocal teaching in the social studies classroom interview protocol. This 13-item semi-structured interview protocol (see Appendix K) included questions related to different constructs for the first four research questions. This instrument assisted with the corroboration and triangulation of findings from quantitative instruments in this study. There are eight subsections contained within the protocol: (a) initial use and process use, (b) teacher satisfaction with PD, (c) teacher suggestions for improvements for the PD program, (d) self efficacy, (e) literacy instruction practices, (f) teacher PD experience, and (g) literacy skills knowledge. Each subsection included researcher-constructed items and items adapted from Kim, Kim, Lee, Spector, and DeMeester (2013).

To address RQ1, teachers answered question one: "Please describe your use of RT PD intervention-related activities during and after the intervention. Do you plan to use any related activities and strategies in the future?"

To address RQ2, teachers answered questions 2-4:"What components of the RT PD do you think had the greatest value to support you to use RT to support the development of student literacy skills in your content area? What components had the least value? On a scale ranging from 1 (Strongly Dissatisfied) to 5 (Strongly Satisfied), how would you rate the RT intervention? Please explain your rating. What suggestions for improvements do you have for the RT PD intervention and why?"

To address RQ3, teachers answered questions 5-7: "What components of RT had the greatest value in supporting the development of student literacy skills in your class? What components had the least value? On a scale rating from 1 (Strongly Dissatisfied) to 5 (Strongly Satisfied), how would you rate the usefulness of RT for improving students' motivation and ability to read content area material? How would you alter the implementation of RT next time? Why?"

To address RQ4, teachers answered questions 8-10: "Can you talk about your confidence with instructing students in content-area literacy practices? What influences your confidence and why? Can you explain the ways in which the RT PD influenced your confidence to support students literacy skills in your content-area? Why do you think the PD had this effect? What effect, if any, did the RT PD program have on your literacy instruction proficiency to support student literacy skills in your content-area? Why do you think it had this effect?" To also address RQ4, teachers answered questions 11 – 13: "Tell me how you think about using literacy instruction to support student learning, especially student literacy skills in your content-area. What would describe as the major factors influencing your integration of literacy skills in your instruction to support student learning? In what ways, if any, did the RT PD program support you to integrate literacy instruction to support student learning? Why do you think it had this effect?"

Reach and dose surveys. The purpose of the Reach and Dose Surveys (see Appendix L) was to provide information regarding: (a) program awareness, (b) message awareness, and (c) usage of materials by teachers in the study. Specifically, it measured program implementation related to RQ1 and assisted with the assessment of internal validity and the identification of ineffectiveness due to low implementation, which is

important to understanding treatment fidelity (Baranowski & Stables, 2000). Three sessions (2,5,7) were surveyed for this portion of the study. Teachers responded to 5 items using a 5-point scale ranging from "1" (Strongly Disagree) to "5" (Strongly Agree). These items included statements such as: (a) "The program for this session was clear," (b) "I understood the purpose of this session," (c) "I found the information in this session useful," (d) "I feel confident I can apply the knowledge from this session in my classroom," and (e) "I have already used information related to this session in my classroom."

PD observer's field notes. The purpose of the PD Observer's Field Notes instrument (see Appendix M) was to capture the fidelity of implementation to respond to RQ1. The role of the observer was to be in PD sessions to assess levels of teacher involvement in the PD and his or her receptivity to implementing the RT implementation in his or her classroom.

Teacher implementation of reciprocal teaching rubric. To provide quantitative data to answer RQ3, teachers implemented the four steps of RT for students using the text "United States Economic Imperialism" (Beck et al., 2009; see Appendix N). The researcher and EDC rated the accuracy of three aspects of teachers' RT implementation with students: (a) direct explanation of session topic, (b) guided practice with students, and (c) students' completion of the assigned independent activity (see Appendix O).

Outcome evaluation indicators. Outcome measures must have a high degree of reliability, validity, and sensitivity to yield believable results (Rossi et al., 2004). The use of pretests and posttests measuring the same outcome provides an ability to identify any change reported by participants (Rossi et al., 2004). This study employed four survey

instruments and two interview protocols to collect data from teachers and students. The following sections present the measures by outcome evaluation indicator.

Teacher self efficacy and literacy instruction scale. The Teacher Self efficacy and Literacy Instruction Scale (TSELI; Tschannen-Moran & Johnson, 2011) measured teacher self efficacy as it related to his or her ability to deliver RT before and after the intervention as part of RQ4 (see Appendix P). The reliability of the scale was confirmed by Tschannen-Moran and Johnson's calculation of internal consistency via Cronbach's α (α = .96). The original 22 item survey was reduced to the 13 items that focused on reading and motivation for the purposes of this study. Survey items included questions such as: "To what extent can you use a student's oral reading mistakes as an opportunity to teach effective reading strategies?" and "To what extent can you adjust reading strategies based on ongoing informal assessments of your students?" Teachers responded to questionnaire items using a 9-point Likert scale designed to gain a better understanding of challenges teachers faced in the classroom during the implementation of RT. The anchors for the scale were as follows: (1) Not at All, (3) Very Little, (5) Some Influence, (7) Quite a Bit, and (9) A Great Deal.

Literacy instruction beliefs and competencies survey. The Literacy Instruction Beliefs and Competencies Survey (LIBCS; see Appendix Q) assessed teachers' integration of literacy instruction into their daily pedagogical activities with students in the classroom, which also is part of RQ4. The original survey, which examined teachers' use of technology in daily instruction with students (Brinkerhoff et al., 2002), was adapted to reflect integration of literacy instruction. Participants responded to these 10 items using a four-point Likert scale that ranged from 1 (Strongly Disagree) to 4

(Strongly Agree). Example items from the original survey included: "I integrate technology into the curriculum" and "Technology plays an integral role in supporting content learning in my class." These example items were adapted for this study to read: "I integrate literacy activities into the curriculum" and "Reading instruction is an integral part of content learning in my class."

Graphic organizer assessement sheet. The focus of RQ5 was the extent students correctly implemented the four steps of RT and used proper terminology in their groups. Students were provided role sheets for RT (see Appendix R), the section of text that followed "United States Economic Imperialism" (see Appendix N; Beck et al., 2009) titled "Turmoil and Change in Mexico" (see Appendix S; Beck et al., 2009), and graphic organizers (see Appendix T) to complete while working in their groups. The researcher and EDC assessed each student's performance by evaluating their graphic organizers after each session (see Appendix U). Students' work was rated on a four-point scale with indicators including "1" (none of the time), "2" (some of the time), "3" (most of the time), or "4" (all the time).

World history reading comprehension assessment. The "Marching Toward War" reading and assessment (Beck et al., 2009; see Appendices V and W) served as the measure of reading comprehension to respond to RQ6. This assessment asked questions about a passage of text that discussed the events that led to the outbreak of World War I in Europe. Ten multiple choice questions comprised the pretest and posttest. Examples of the questions that students were asked included: "Nationalism would best be defined as: (a) a deep devotion to one's nation, (b) a desire to see military strength in one's nation, (c) a desire to see nations join for the purpose of making treaties, or (d) a preference to

isolate one's nation from others." Another question was: "Which of the following did NOT contribute to the rivalry among European countries? (a) disagreements regarding what territories belong to countries, (b) competition for materials and markets throughout the world, (c) ethnic groups within the Balkans sought their independence, or (d) the creation of medicine thought to cure influenza."

Adolescent motivation to read profile. This two-part instrument developed by Pitcher et al. (2007) provided data to respond to RQ6. The quantitative portion of the AMRP (see Appendix X) consists of a 20-item reading survey. Respondents indicate their agreement or frequency of behavior on a four-point scale that varied depending upon the item. Ten questions assessed a student's self-concept as a reader and 10 questions assessed the value they placed on reading. Example items included: "When I am reading by myself, I understand: (a) Almost everything I read, (b) Some of what I read, (c) Almost none of what I read, or (d) None of what I read" and "If I had a strategy to use when reading to help me understand, I am (a) Likely (b) Most Likely (c) Less Likely and (d) Not Likely to read more."

The qualitative portion of the AMRP (see Appendix Y) contains fourteen scripted items that were open-ended to encourage free responses and discussion. The purpose of the interviews was to provide a view of instructional methods used in the classrooms. Example items include: "Were you ever taught methods or strategies to help you understand text?" and "Could you explain for me how you approach reading social studies text now after participating in this study?"

Pitcher et al. (2007) field-tested the 20-item reading survey with 384 students in grades 6-12 and the 14-item interview portion with 100 students in grades 6-12 but did

not report reliability and validity information. As noted by Davis, Tonks, Hock, Wang and Rodriguez (2018), however, the AMRP was adapted from the Motivation to Read Profile (Gambrell, et al., 1996). The Motivation to Read Profile has acceptable reliability estimates ($\alpha = .76$), complementary quantitative and qualitative sections, easily accessible items and directions for administration, and is relatively quick to administer to students.

Procedure

The following sections outline details regarding conducting the current intervention, including participant recruitment, timeline and instructional design sequence, data collection procedure, and data analysis procedure.

Participant Recruitment. The researcher invited teacher participants to a meeting about the study, provided a description of their involvement in PD sessions, and the role they would enact during the implementation phase of the study. They were provided the required Johns Hopkins HIRB Letter for Teacher Informed Consent for this study (see Appendix Z).

To recruit student participants, the EDC visited the seven classrooms identified for inclusion and provided an overview of the intervention study procedures (see Appendix AA). Email and phone call announcements were made via the school's automated communication system describing the proposed study (see Appendix BB) and notifying parents that students would be coming home with the required Johns Hopkins HIRB Parental Permission/Student Assent form (see Appendix CC). Students and parents were asked to sign the and return the letter of consent to their teacher or the main office.

Intervention overview. The *Reciprocal Teaching in the World History Classroom* intervention was intended to promote an increase in social studies teachers'

instructional self efficacy, instructional beliefs, and perceived ability to implement reading comprehension strategies in their freshman social studies classroom instruction with the goal of increasing students' reading comprehension of and motivation to read social studies text. The setting of the PD was a series of on-site workshops for teachers conducted by an instructional coach, Jane[1], who specialized in literacy. Jane served as a consultant for the district for 6 years prior to the present study working with K-6 teachers and instructional assistants on unpacking and delivering the "Wonders" literacy curriculum available through McGraw-Hill Education.

The instructional coach provided 7 consecutive days of training to introduce, train, and assist teachers to implement RT. Teachers involved in the PD were released from their instructional duties at 11:00 A.M. (the mid-point of their work day) to participate in each of the PD sessions. Each session ended between 2-3 P.M. PD sessions involved a variety of activities, including PowerPoint presentations, interactive exercises with technology, video clips, readings, discussions, individual assignments, session reflections, role playing, and a summative project. A PowerPoint for Session Two that illustrates a typical session is included in Appendix DD. This intervention was delivered using the design found in the Logic Model (see Appendix F) and Theory of Treatment (see Appendix H).

The objectives for each of the PD sessions related to the intervention are listed in Table 4.1. Each session lasted between three to four hours.

Table 4.1

Objectives for Each Session of Reciprocal Teaching Professional Development

[1] Jane is a pseudonym for the instructional coach in this study.

Session	Topic/Objectives
Session 1	Introduction to Adolescent Literacy
	Teachers will review the history of literacy instruction K-12, with a focus on secondary literacy instruction. This will be delivered via PowerPoint and will provide background information to support the implementation of the RT intervention.
Session 2	Introduction to Reciprocal Teaching
	Teachers will review the information from Session 1 and receive course materials to include an overview of RT. Each of the four strategies will be introduced to teachers, they will see each strategy carried out on video and then complete an assignment that will be used to start Session 3. Teachers will receive "Marching to War" reading.
Session 3	RT: Step One – Predicting
	Teachers will review the information from Session 2. The cooperative strategy "JIGSAW" will be introduced, and the different ways students can be organized for RT activities. The instructional coach will go deeper into predicting with teachers. It will be introduced via PowerPoint, teachers will watch a video clip on predicting, and then the instructional coach will lead a predicting session with teachers to include guided practice and role play. Teachers will use the reading "Marching to War" in the intervention and develop predicting questions for homework.
Session 4	RT: Step Two – Questioning
	Teachers will review the information from Session 3. The instructional coach will go deeper into questioning with teachers. It will be introduced via PowerPoint, teachers will watch a video clip on questioning, and then the instructional coach will lead a questioning session with teachers to include guided practice and role play. Teachers will use the reading "Marching to War" in the intervention and create questions for homework.
Session 5	RT: Step Three – Clarifying
	Teachers will review the information from Session 4. The instructional coach will go deeper into clarifying with teachers. It will be introduced via PowerPoint, teachers will watch a video clip on clarifying, and then the instructional coach will lead a clarifying session with teachers to include guided practice and role play. Teachers will use the reading "Marching to War" in the intervention and create clarifying questions for homework.

Session 6	RT: Step Four – Summarization
	Teachers will review the information from Session 5. The instructional coach will go deeper into Summarizing with teachers. It will be introduced via PowerPoint, teachers will watch a video clip on summarizing, and then the instructional coach will lead a summarizing session with teachers to include guided practice and role play. Teachers will select a second piece of text that they will use in the intervention and create summarization questions for homework. Teachers will also create an outline of an RT lesson to share.
Session 7	Summary
	Teachers will review the information from the beginning of the PD session through Session 6. They will review the RT process created during this session that they will use with students during the intervention period. Teachers will present their outlines of an RT Lesson to the group for feedback from peers. Teachers will complete the program evaluation surveys and describe their experiences in the RT PD.

First, participants were introduced to the topic of adolescent literacy and the current state of reading comprehension achievement among high school students. There was discussion related to the role of motivation in adolescents' desire to read and the potential of RT for increasing students' motivation to engage in content area reading and reading comprehension in social studies. The remaining days were allotted to introduce, practice, and administer the four components of RT: (a) prediction, (b) questioning, (c) clarifying, and (d) summarization. Beginning with session three, the teachers were introduced to the RT strategy, the instructional coach modeled the strategy, and teachers role played implementing each strategy with their peers. At the end of the PD sessions, teachers reviewed their pacing guides to include the implementation of the RT intervention**.**

Following the PD, teachers implemented the RT instructional strategy with students for 20 days over a one-month period. The first day of the intervention the researcher administered the reading comprehension pretest (see Appendices V and W) as

well as the quantitative portion of the AMRP (See Appendix X). Teachers introduced RT to students with a suggested script for implementation provided by Jane (see Appendix EE) to increase the likelihood of standardized implementation. Students brainstormed and charted strategies that good readers use in a "Think, Pair, Share" activity and then shared their responses with the class while the teacher recorded their answers. At the end of this activity, teachers shared the objective of the lesson, which was to identify four strategies that good readers use to comprehend text. Teachers informed students that they would be introduced to the following strategies: (a) predicting, (b) questioning, (c) clarifying, and (d) summarization, in more depth, with focus on using each step correctly. Students were also alerted that they would be using a section of text titled "United States Economic Imperialism" (see Appendix N) to help understand the proper use of each step. The researcher and the EDC assessed teachers' implementation of the RT steps with students using the Teacher Implementation of Reciprocal Teaching rubric (see Appendix O).

During the second week of the intervention, groups of four students were assigned the following roles: (a) predictor, (b) questioner, (c) clarifier, or (d) summarizer (see Appendix R) and directed to "Turmoil and Change in Mexico" in their textbooks (Beck et al., 2009; see Appendix S). This was the last piece of text before students would encounter "Marching to War" again to read and compete their posttests (Beck et al., 2009; see Appendices V and W). At the start of class each day, teachers guided students through a paragraph reminding them of the four aspects of RT. Students began to read text in a group format. Although students facilitated their groups at different times based on their assigned roles, all students wrote their thoughts down on their graphic organizers (see Appendix T) for each role when it was being practiced by the group. The researcher

and the EDC assessed students' implementation of RT using the "Graphic Organizer Assessment Sheet" (see Appendix U). This protocol continued during the remaining weeks of the intervention with teacher support fading over time. For example, teachers guided reading lessons with RT one out of the two days during weeks 2 and 3. During week 4, students facilitated their groups without teacher involvement.

The instructional coach and teachers met daily to discuss their implementation with students and aspects of implementation that he or she felt needed to be revisited based on the literacy coach's observations. During each week of the intervention, the instructional coach and teachers met to discuss his or her experiences of that week related to implementing the RT treatment. This allowed teachers to ask questions of Jane and each other to strengthen the delivery of the RT intervention. It also provided Jane with a sense of how teachers were feeling during the implementation process and the opportunity to provide support.

Data Collection

Data were collected simultaneously following the convergent mixed methods design of this study. Specific data collection procedures for individual measures are outlined in the following sections by instrument, moving from process to outcome evaluation indicators. Data were collected by the researcher and the EDC.

Demographic surveys. Teachers completed their demographic surveys (see Appendix I) in the PD room prior to the start of their first professional development session. Completion of the surveys took approximately 2 minutes. Students completed their demographic surveys (see Appendix J) in their classrooms prior to teachers beginning the RT overview on day one of implementation.

Reciprocal teaching in the social studies classroom interview protocol. Teachers were interviewed (see Appendix K) after the intervention in the researcher's office. Answers to questions were captured via audio recording. Each interview lasted approximately 20 minutes.

Reach and dose surveys. The researcher collected post-session surveys (see Appendix L) from teachers in the PD room after sessions 2, 5, and 7 of the professional development sessions provided by the instructional coach. Teachers spent about 2 minutes per session completing the form.

PD observer's field notes. The researcher captured observational data (see Appendix M) regarding teachers' responsiveness to the professional development activities taking place each session and their perceived willingness to implement RT in their classrooms. Notes were created during each professional development session, which lasted approximately 2-3 hours each.

Teachers implementation of reciprocal teaching. The researcher and EDC rated the accuracy of teachers' RT implementation with students in three areas: (a) direct explanation of session topic, (b) guided practice with students, and (c) students' completion of the assigned independent work (See Appendix O). Each rating session took approximately 60 minutes.

Teacher self efficacy and literacy instruction scale. Teachers completed the TSELI (see Appendix P) prior to the beginning of session one and after the conclusion of the RT intervention. The survey took about 5 minutes for teachers to complete preintervention and postintervention.

Literacy instruction beliefs and competencies survey. Teachers completed the LIBCS (see Appendix Q) prior to the beginning of session one and after the conclusion of the RT intervention. Teachers spent about 5 minutes completing the TSELI.

Graphic organizer assessement sheet. The researcher and EDC assessed proper student use of RT steps (see Appendix R) and use of terminology without teacher assistance by evaluating students' graphic organizers (see Appendix T) using a rubric (see Appendix U). Each assessment session lasted about 60 minutes and was completed in the researcher's office.

World history reading comprehension assessment. Students completed the "Marching to War" reading and answered a 10-question reading comprehension assessment (see Appendices V and W) at the beginning and end of the intervention period in their classrooms. Each administration took students approximately 20 minutes to complete.

Adolescent motivation to read profile. The researcher facilitated the AMRP – Quantitative survey (see Appendix X) prior to teachers beginning the RT overview on day one of implementation and at the end of the intervention period in their classrooms. Each administration took approximately 20 minutes. At the conclusion of the intervention period, 25 students completed the AMRP – Qualitative interview (see Appendix Y) in the researcher's office. Each interview was audio recorded and lasted approximately 20-30 minutes.

Data Analysis

As this is a mixed methods explanatory design study, quantitative and qualitative data were collected and analyzed separately, and then together, to triangulate responses

from various data sources. Methods of analysis for each measure are discussed in the following sections by similar analysis type.

Quantitative data analysis. Descriptive statistics that included numbers of participants, percentages, means, and SDs were calculated for several instruments in this study, including the Demographic Survey for Teachers (see Appendix I) and the Demographic Survey for Students (see Appendix J). Similarly, descriptive statistics were calculated after PD sessions two, five, and seven (see Apppendix L) to depict clarity of program purpose, clarity of session purpose, usefulness of session information, teacher confidence regarding independent application of knowledge and skills, and teacher use of session information prior to the training. In addition, descriptive statistics were calculated for observational data collected by the researcher and EDC regarding teachers' implementation of RT in classrooms with students (see Appendix O) and students use of RT during the independent group portion of the intervention (see Appendix U). The researcher calculated and compared the descriptive statistics and percentage agreements scores between the researcher and EDC for teachers' implementation of RT with students and students' use of RT in their groups to determine interrater reliability.

Teachers' preintervention and postintervention survey scores for the TSELI and LIBCS were independently compared using descriptive statistics and Mann-Whitney U tests to examine potential differences in preintervention and postintervention scores. Finally, descriptive statistics were calculated and paired samples *t* tests were run to examine changes between students' pretest and posttest reading comprehension scores (see Appendices V and W). Also, descriptive statistics were calculated and paired

samples *t* tests were run using preintervention and postintervention scores from students' completion of the Adolescent Motivation to Read Profile (see Appendix X).

Qualitative data analysis. The quantitative results referenced in the previous section were further explored and triangulated using teachers' and students' responses to three qualitative instruments. The Reciprocal Teaching in the World History Classroom Interview Protocol (see Appendix K) provided contextual information to further understand quantitative items related to RQ1 (1), RQ2 (2-4), RQ3 (5-7), and RQ4 (8-13). Emergent thematic coding was enacted to code response data. The coding for this instrument was completed in an inductive manner using Glaser and Strauss's (1967) grounded theory approach to identify emergent categories and subcategories. The researcher read and reread field notes five times to identify the emergent categories. Interview data were then sorted into these emergent categories. Next, the researcher noted common themes within the categories and further sorted and differentiated them into subcategories, when appropriate. The analysis necessitated constant comparison to consolidate similar concepts into overarching ones, which allowed for theme differentiation (Corbin & Strauss, 2008). Additionally, the researcher sorted participant themes related to negative and positive statements, enthusiasm, and interpretation accuracy, which were used to analyze the field notes with other process evaluation data.

The PD Observer's Field Notes (see Appendix M) captured teachers' responsiveness within the PD experience as well as their perceptions of teachers' feelings regarding his or her ability to implement the RT intervention in classrooms. The Adolescent Motivation to Read Profile (see Appendix Y) captured students' perceptions about the impact of the RT intervention on their motivation to read content specific text.

These data were reviewed and coded as previously described.

The strengths and limitations of the study are discussed in more depth in Chapter Five. Researcher subjectivity and trustworthiness of the qualitative data, however, are appropriate to briefly mention here before reviewing the findings and discussion of this study. As previously mentioned in Chapter One, the researcher is also the principal of the study's research site. Although this is not uncommon in social science research, personal biases can directly or indirectly influence the collection, handling, interpretation, and reporting of data (Schutt, 2012). As stated in this chapter, the researcher took steps within the the research design to remain distanced from the study's participants and activities to the extent practicable in order to not invalidate the results of the study. The researcher did have contact with participants in the context of administering pretests and posttests, preintervention and postintervention scales and surveys, and conducting interviews with participants' using semi-structured interview questions. Despite the distancing measures and adherence to study procedures, there is bias introduced into this study by the researcher.

Chapter Five

Findings and Discussion

The purpose of this study was to examine the effect of a school-based PD program on teachers' self efficacy, instructional beliefs, and perceived ability to implement RT in freshmen, college preparatory, social studies classrooms. It was hypothesized that in the short-term secondary social studies teachers who participated in the RT PD intervention would report increased instructional self efficacy, instructional beliefs, and perceived ability to implement RT after experiencing the RT PD intervention. Based on the hypothesized short-term increases in teachers' instructional self efficacy, instructional beliefs, and perceived ability to implement RT, the expected medium outcome is that RT becomes a common pedagogical strategy in social studies classrooms in grades 9-12. The desired long-term outcome is that RT becomes a common pedagogical strategy across all content areas in grades 9-12. This chapter is organized by the findings related to the six research questions presented in Chapter 4 (see Appendix G).

Enacted RT Professional Development for Teachers

To address RQ1, the researcher collected teachers' responses on the Reach and Dose Surveys (see Appendix L) after PD sessions two, five, and seven. These data were descriptively analyzed for the purpose of assessing the delivered PD program and the extent to which it was implemented with fidelity. Teachers indicated their agreement with five survey items on a five-point scale to capture their perspectives related to: (a) program purpose, (b) ability to understand presented material, (c) usefulness of the session information, (d) application of session information in their classrooms, and (e)

use of session information prior to the RT PD. Table 5.1 presents teachers' mean responses on the Dose Received Surveys.

Table 5.1

Dose Received Survey Mean Responses (n = 8)

Session	Session 2 M (*SD*)	Session 5 M (*SD*)	Session 7 M (*SD*)	Sessions 2,5,7 M (*SD*)
Program Purpose	4.63 *(0.52)*	4.63 *(0.52)*	4.63 *(0.52)*	4.63 *(0.52)*
Understood Purpose / Material Presented	4.63 *(0.52)*	4.63 *(0.52)*	4.63 *(0.52)*	4.63 *(0.52)*
Information Useful	4.63 *(0.52)*	4.63 *(0.52)*	4.63 *(0.52)*	4.63 *(0.52)*
Can Apply in Class	4.63 *(0.52)*	4.63 *(0.52)*	4.63 *(0.52)*	4.63 *(0.52)*
Using Information Already	3.75 *(1.04)*	3.63 *(0.92)*	4.25 *(0.71)*	3.96 *(0.95)*

As displayed in Table 5.1, teachers indicated strong agreement related to understanding the purpose of each PD session and material presented. Teachers noted the usefulness of session information, and their ability to apply session information in their classrooms. Although teachers indicated they had not previously participated in literacy training (including RT) as noted on the Teacher Demographic Survey (see Appendix I), three teachers noted during the PD that they were using clarification and summarization strategies. Teachers indicated that their knowledge and use of these strategies developed through their years of teaching experience and not from formalized trainings or prior professional development. In addition, one teacher affirmed she did not have any literacy instruction.

Teacher Experiences with RT PD

The focus of RQ2 was teachers' experiences related to the RT PD and their perceptions of the most beneficial aspects and least beneficial aspects of the RT PD. Similar to the Reach and Dose Surveys (see Appendix L) teachers completed during their RT PD sessions, the researcher personally followed-up with each teacher and asked them to verbally rate their individual experience with the RT PD. Teacher ratings revealed strong satisfaction with the RT PD sessions related to RT's usefulness to their teaching practice ($M = 4.69$, $SD = 0.492$). Several teachers remarked that the RT PD was one of the most valuable PD topics they experienced in years. One statement was particularly powerful related to the high value of the RT PD expressed by teachers:

> The background on linguistics and literacy in general were very helpful to me, as an educator and a parent, because it is an area that is out of my professional comfort zone. I had a clear understanding based on this information how and why Reciprocal Teaching could work for our students.

Another teacher captured the overall feeling of the group regarding working with each other and Jane during the RT PD process, "our ability to have time in the PD to develop lessons was the best part of Reciprocal Teaching PD. It allowed us to work together and with Jane in order to make truly meaningful assignments." This statement supported Homan's (2014) assertion that instructional coaches can have a positive impact on teachers' classroom practices when they share in the lesson development and conversations of teachers they are supporting. This statement also highlighted the benefits of teachers working together in a CoP as discussed in the literature synthesis (Fuller et al., 2013; Lave & Wenger, 1991; Wenger-Treyner & Wenger-Treyner, 2015).

Teachers' positive experiences with RT PD also supported research from the field of andragogy (Knowles, 1975). Adults need to be active and involved in their exposure and internalization of new research, theories, or skills. Some of the activities that have demonstrated utility for teachers to be active participants in PD activities include: (a) readings, (b) role playing, (c) open-ended discussions, real-time modeling, and (d) visits to classrooms to see the method under examination in action (Gulamhussein, 2013). This was illustrated by the following teacher's comment, "I personally believe that becoming the student during the PD provided for us was most important. Learning the strategies [of RT] from the position of a student allowed me to anticipate the struggles and confusion my students might face." A similar comment was offered by another teacher, "the ability to bring our own materials into the study toward the end of the Reciprocal Teaching PD to look at how this might play out in the classroom was extremely advantageous, as well."

Of the eight teachers who participated in the RT PD, four indicated they would have liked more group PD time together with Jane once the implementation phase of the RT intervention began. The following comment from one teacher captured the essence of all four teachers:

> I think it would be more helpful to have four days of PD up front before beginning the intro lessons and then come back together to discuss what we were finding and to ask additional questions. I would have liked more opportunities to meet as a group and with Jane.

Another teacher specifically identified some of the questions he would have addressed with Jane and colleagues if given the opportunity to check-in with them after the start of

the intervention period, "I would have liked to be able to plan accordingly with the group for students who struggle to master one or more of the strategies, as well as have a plan in place for any students who might be sabotaging the group work." Overall, however, the PD sessions were perceived by teachers as a positive experience.

Teacher Implementation of RT in Classrooms

To address RQ3, data were collected during each day of teachers' implementation of RT with students. Teachers were provided a suggested script (see Appendix EE) as a reference guide while they prepared and delivered daily lessons; however, they were not required to use the script verbatim. Over the five-day implementation period, teachers introduced and modeled the four steps of RT for students, participated in guided practice of the four RT steps with students, and assigned independent work for students to complete.

The researcher and EDC observed and independently rated three aspects of teachers' implementation of RT with students, including: (a) direct explanation of session topic, (b) guided practice with students, and (c) students' completion of the assigned independent activity. The researcher and EDC assigned a rating of "1" (incorrect) to "3" (correct) to each teacher at the end of each implementation session (see Appendix O). A high level of agreement existed between the researcher and EDC regarding teachers' implementation of the four steps of RT with students. The percentage agreement scores between the researcher and EDC for implementation of RT in the classroom (n = 7) reflected acceptable levels of agreement between these two coders: (a) direct explanation (94.4%), (b) guided practice (97.2%), and (c) independent practice (100%).

Teachers who consistently earned scores of "3" during the implementation period

were observed using the suggested implementation script (see Appendix EE) verbatim and implemented RT with students in the same manner Jane did with teachers during the PD portion of the intervention. One teacher confirmed these observations by stating, "after the PD I used the training and script on RT as prescribed in my classroom." Another teacher added, "I used the PD in the same way we talked about in the sessions with Jane." However, teachers who received scores of less than "3" did not use the suggested implementation script (see Appendix EE) in the same manner. As stated by one teacher:

> Providing an example script of how to provide the "I DO" Reciprocal Teaching instruction for the first day was helpful. This provided a practical example of how to integrate literacy instruction [with students in the classroom]. I was able to then shape my delivery of the steps around the script. I liked that I didn't have to follow it verbatim but that it gave me an example to follow.

This sentiment was similar to comments made by other teachers. Teachers who elected not to use the script verbatim appeared to have little difficulty with the implementation of RT with students. One teacher stated, "I was able to use Reciprocal Teaching in my classroom to implement the intervention with a large amount of success." Another teacher added, "during the Reciprocal Teaching intervention the students were taught each of the four strategies associated with the Reciprocal Teaching, first as a whole, and then individually as we practiced each strategy as a group." Teachers who used the implementation script received slightly higher implementation scores than their colleagues who did not use the script. As a result, additional consideration for using the teacher script verbatim to implement RT with students might be warranted when teachers

begin implementing an instructional strategy.

Self efficacy, Instructional Beliefs, and Perceived Ability to Implement RT

To explore changes in teachers' self efficacy, instructional beliefs, and perceived ability to implement RT within social studies instruction as stated in RQ4, pretest and posttest results from the TSELI (see Appendix P) and the LIBCS (see Appendix Q) were compared separately using Mann-Whitney U tests due to the small number of teachers who participated in the study (*n* = 7*).* Interview data from the Reciprocal Teaching in the Social Studies Classroom Interview Protocol (Questions 8-13; see Appendix K) were analyzed using thematic coding to understand the teachers' quantitative ratings. Reliability estimates for the TSELI and LIBCS were calculated using Cronbach's alpha (α) to assess internal consistency. The acceptable lower end of Cronbach's α that provides assurance of internal consistency is 0.70, although estimates above 0.80 are preferred, as they provide greater assurance of internal consistency (Cortina, 1993). Table 5.2 presents the reliability estimates for the TSELI and LIBCS.

Table 5.2

Pretest and Posttest Reliability Estimates of Teachers (n = 7)

Scale	Pretest α	Posttest α
TSELI	0.78	0.60
LIBCS	0.69	0.69

The pretest and posttest α estimate for both surveys were lower than the accepted .80 threshold. As a result, findings based on these data are held tentatively. The small number of teacher (*n* = 7) responses likely resulted in these lower α estimates.

Table 5.3 provides the means, SDs, and Mann-Whitney U scores for the pretests and posttests for each survey. The range of possible scores for the TSELI was 0 to 9, and

the range of possible scores for the LIBCS was 0 to 4.

Table 5.3

Teachers' Pretest, Posttest, and Paired Sample Mann-Whitney U Test results for Pretests and Posttests for TSELI and LIBCS (n = 7)

Instrument	Pretest M *(SD)*	Posttest M *(SD)*	Mann-Whitney U Z *(p)*
TSELI	4.39 *(0.66)*	8.41 *(0.25)*	2.375 *(0.02)*
LIBCS	1.33 *(0.21)*	3.44 *(0.28)*	2.371 *(0.02)*

TSELI. The pretest mean ratings ($M = 4.39$, $SD = 0.66$) reflected a slightly negative perception by teachers regarding their efficacy beliefs related to assisting students with content area reading skills in social studies. However, teachers' posttest mean ratings ($M = 8.41$, $SD = 0.21$) were significantly higher ($U = 0$, $Z = 2.375$, $p = 0.017$). This analysis demonstrated that teachers' perceptions of their self efficacy dramatically improved over the course of the intervention period.

Teachers mentioned that their PD experiences, meetings with Jane, and collaborative efforts with colleagues during the implementation phase was influential to their positive change in self efficacy. One teacher offered the following statement:

> I was not confident at all prior to this training as I had no frame of reference about high school literacy and the different strategies of good readers. After having a detailed professional development experience, multiple days with coaching, I felt secure in my ability to deliver Reciprocal Teaching and other strategies if I was taught them.

This statement was particularly interesting because the teacher highlighted the

positive impact of the PD, but also suggested strong feelings of self efficacy with instructing additional literacy strategies if "taught them." This comment illustrates Webster-Wright's (2009) assertion that high-quality PD "does something to the professional" and supports Leiberman and Wood's (2002) findings that meaningful PD is socialized, on-going, and directly relates to teachers' work in the classroom. Another statement by a teacher similarly mentioned the positive influence the RT PD had on teachers perceived self efficacy, further illustrating the assertions of Webster-Wright and Leiberman and Wood:

> If someone had asked me to teach Reciprocal Teaching or some other literacy strategy prior to the PD I would not have done it. I did not have any appreciation for the importance of the issue (adolescent reading), but also did not have any training, either. After the PD I felt confident to begin instructing Reciprocal Teaching with my students.

In another example, one teacher offered this statement, "I left the PD feeling as though I could absolutely teach Reciprocal Teaching to my students and be successful with it." Another teacher stated, "I felt much more confident coming out of the Reciprocal Teaching PD than other PD opportunities in the past."

In addition, Jane was referenced by several teachers as a strong influence on their self efficacy. First, Jane's ability to "connect" with the teachers in the PD session made them feel comfortable and willing to take risks and ask questions. This was articulated by one teacher this way:

> The Reciprocal Teaching PD and the knowledge and confidence gained from working with Jane was critically important in letting me talk through areas of

> implementation that were of concern and made me nervous. After talking through some things and being reassured I was doing things correctly, I really felt good leaving the PD.

A second teacher supported her colleague's previous statement and expanded on it by stating how impressed she was with Jane's deep understanding of high school social studies content and how to utilize RT in that context:

> Jane was truly fantastic to work with in the Reciprocal Teaching PD and in coaching sessions. She was able to explain everything in a down-to-earth way and to help us understand the practicality of Reciprocal Teaching. Her real-life examples and modeling exercises provided us with a clear understanding of the process and its potential to benefit our students.

Strong content knowledge and related skills in the discipline are as important for an instructional coach as is their ability to foster trusting relationships (Tschannen-Moran & Johnson, 2011). This was especially important as RT was foreign to teachers. Other teachers' comments continued to highlight Jane's ability to deliver the RT PD in terms teachers understood and could extrapolate to their current work after the PD sessions and the coaching process started. One teacher commented, "having Jane helped my confidence during the implementation process" and another teacher stated, "access to Jane was really helpful during the implementation."

In addition to working with Jane, teachers stated that interactions with their colleagues during the intervention period was an essential to their increased perceptions of self efficacy. As stated by one teacher, "after working with Jane and my colleagues, I felt secure in delivering Reciprocal Teaching." Another teacher said, "I think what

influenced me was being supported by my colleagues." Another teacher similarly stated, "after the PD, I felt really confident. I think what influenced me was being supported by my colleagues, having access to Jane, and being able to try things without fear if things did not work out."

LIBCS. The pretest mean ratings of teachers ($M = 1.33$, $SD = 0.21$) demonstrated perceived feelings of low ability to instruct students about literacy skills in social studies. However, teachers' posttest mean ratings ($M = 3.44$, $SD = 0.28$) were significantly higher than their pretests ($U = 0$, $Z = 2.371$, $p = 0.017$). Teachers' perceived feelings regarding their ability to implement literacy practices (RT) with students increased dramatically over the course of the intervention period. Survey responses from teachers were supported by their interview responses.

One teacher's statement captured the overall experiences of his colleagues and how those experiences translated into perceived feelings of strong instructional competence at the end of the intervention:

> The knowledge, skills, and support received during this experience from the initial PD, to Jane's coaching sessions, to the work with colleagues helped me establish a feeling of instructional competence where I am very comfortable doing this again in the fall. I cannot teach it to someone quite yet, but I am comfortable saying I am competent.

Another teacher echoed her colleague's sentiment; however, she provided more specificity about how the implementation of the intervention led to her increased feelings of efficacy:

> The Reciprocal Teaching PD gave me a systematic approach to help students read

> and understand complex text. I felt that first learning about adolescent reading, how Reciprocal Teaching can be a benefit, and working with Jane and my colleagues was excellent. I got to understand the problem, how we could potentially fix it, and then work with colleagues together to deliver the Reciprocal Teaching. I feel confident that I could refine this over the summer and be better at it next year.

Jane's coaching role during the implementation of RT with students was invaluable to teachers. The following comment from a teacher captured the group perspective on Jane's involvement, "at no point did I feel as though I was on my own. Access to Jane gave me confidence moving into the instruction portion of each strategy with students." Another teacher stated, "the coaching sessions with Jane were helpful for me to check myself along the way and ask questions. This helped a lot."

Student Implementation of RT

Students were placed in groups of four to begin using RT with each other after completing the implementation of RT activities with their teachers. Students were given a summary of the roles of RT (see Appendix R), directed to the section of text to be used during implementation (see Appendix S), and graphic organizers to complete while working in their groups (see Appendix T). Teachers checked in with each group and provided suggestions for students in their different roles as needed. This support faded over time as students demonstrated proficiency with each step and the ability to work independently in their groups.

To respond to RQ5, the researcher and EDC assessed students' use of each of the four RT steps in their groups by evaluating their graphic organizers (see Appendix U).

For each of the four strategies, students were assigned a score of "1" (none of the time), "2" (some of the time), "3" (most of the time), or "4" (all the time) to reflect their use of correct words/phrases for each of the RT steps. A high level of agreement (95.8%) existed between the researcher and EDC ratings of students' use of the four RT steps during the group portion of the intervention. Table 5.4 provides a summary of mean ratings and number (percentage) of students by use rating (e.g., most/all of the time, some of the time, and none of the time) for each of the four RT steps assessed on students' graphic organizers.

Table 5.4

Mean Ratings and Number (Percentage) of Students by Use Rating on Graphic Organizers (n = 98)

RT Steps	Mean *(SD)*		Most/All of the Time Rating = 3 or 4 n *(%)*		Some of the Time Rating = 2 n *(%)*		None of the Time Rating = 1 n *(%)*	
	R	EDC	R	EDC	R	EDC	R	EDC
Predicting	3.22 *(0.75)*	3.14 *(0.72)*	85 *(86.7)*	85 *(86.7)*	10 *(10.2)*	10 *(10.2)*	3 *(3.1)*	3 *(3.1)*
Questioning	3.17 *(0.70)*	3.15 *(0.69)*	87 *(88.7)*	85 *(86.7)*	8 *(8.2)*	8 *(8.2)*	3 *(3.1)*	5 *(5.1)*
Clarifying	3.19 *(0.71)*	3.19 *(0.71)*	87 *(88.8)*	87 *(88.8)*	8 *(8.2)*	8 *(8.2)*	3 *(3.1)*	3 *(3.1)*
Summarizing	3.16 *(0.73)*	3.15 *(0.72)*	87 *(88.8)*	87 *(88.8)*	7 *(7.1)*	7 *(7.1)*	*4 (4.1)*	4 *(4.1)*

Note. (R) and English Department Chair (EDC).

As illustrated in Table 5.4 the majority of students used correct words/phrases for predicting at least 87% (n = 85) of the time. There was a slight discrepancy in scoring between the researcher and EDC for questioning. The researcher rated 89% (n = 87) of students used the correct words/phrases for questioning compared to the EDC's rating of 87% (n = 85). The researcher and EDC independently rated 89% (n = 87) of students

used the correct words/phrases for clarifying and summarizing. Of the students that remained, 7% (n = 7) to 10% (n = 10) used correct words/phrases for each of the RT steps with proper textual relevance "some of the time," and 3% (n = 3) to 5% (n = 5) used correct words/phrases for each of the RT steps with proper textual relevance "none of the time."

Generally, students asked good questions about the text, but some of their questions were not appropriate for the category of questioning being used at the time. In one classroom it was observed that a student asked, "I wonder why France did not invade Mexico earlier?" That was a legitimate question to ask during the prediction portion of the RT activity, but not during the questioning phase of the RT activity. In a second classroom a student asked, "What does this section mean?" during the summarizing portion of the RT activity. This question should have been asked during the clarifying portion of the RT activity.

In a third classroom, some students were also observed asking questions that did not match the RT step being used in their groups. Unlike the previous two classrooms, the teacher stopped her class once she realized this was a problem across groups. She brought all students together as a class and asked them to generate questions about the text. The teacher wrote the list of questions on the board and reviewed again with students how to categorize each question as predicting, questioning, clarifying, or summarizing. Students were then asked to go back to their groups to resume their work. These observations made by the researcher and EDC in these classrooms might provide an explanation regarding why some students received ratings of "some of the time" and "none of the time."

Students' Comprehension of Text

To explore the extent the RT intervention might have impacted students' reading comprehension scores, which addresses the first part of RQ6, students' pretest and posttest comprehension scores were compared using paired sample *t* tests. The reliability estimate for the "Marching to War" pretest (see Appendices V and W) was calculated to be 0.958 for the pretest and 0.947 for the posttest. The mean score for students on the "Marching to War" pretest, reflected an average reading comprehension score of 6.7 (*SD* = 1.9) on a scale of 10 points. The mean score for students on the "Marching to War" posttest (see Appendices V and W) revealed an average reading comprehension score of 8.3 out of 10 points, which was significantly different from students' pretest scores (t (97) = 1.09, p = .000).

Statements by students at the beginning of the intervention demonstrated the majority of them did not use any particular reading strategy when they completed the pretest. However, reading the passage and trying to recall specific details from memory was a common theme reported by students (n = 8). As stated by one student, "so I read through it. If I read something I didn't know I reread that sentence and then kept going. And that was pretty much it. Then I answered the questions or whatever." Similarly, two students offered these statements, "I just read it and made mental notes in my head and then answered the questions," and "yeah, I read it and if something sounded important I tried to remember it."

Two students reported reading the "Marching to War" pretest (see Appendices V and W) in a more systematic manner. One student stated, "I underlined words I didn't know and used context clues to figure it out, if I could. Sometimes, I circled things I

thought were important." Another student said, "I underlined bits of sentences in each paragraph I believed were important and then at the end of each paragraph I put a quick one or two sentence summary about everything." When students were asked where they learned the strategy of underlining, circling, and using context clues, they mentioned middle school English class.

At the conclusion of the intervention, however, a majority of students reported using a more formalized approach to completing the posttest (see Appendixes V and W). Contrary to the passive "read and remember" approach many students reported prior to RT instruction, all students interviewed described employing a more interactive approach to reading the historical text during the posttest by employing all or parts of the RT strategy. One student characterized her use of RT this way:

> On the posttest, I looked at all the information and the titles and everything to get an idea about what I was reading. I honestly didn't really remember it that much, so I wanted to make sure I got it all again and then I read through it once. Then I looked back at it and made sure I looked at the parts, because it was broken up into different sections, so I stopped after each section and kind of thought about what I read. I summarized it and then I kind of did that for each section after.

In this quote, the student described her use of prediction, clarification, and summarization.

Other students reported using different RT steps during their posttest reading of "Marching to War" but did not explicitly mention using the steps together. One student discussed their use of prediction, "I definitely approached it a little bit differently. I predicted more. Normally, I never predicted what would happen, so I predicted more.

That helped." Another student discussed his use of questioning this way, "well, I thought about it more, like I wrote questions on stuff, like a little something on the side that would help," and one student discussed her use of clarifying to understand the meaning of words, "if there is a word or something I do not know, I will look it up. If there is something I don't understand, I will try and take my time to understand it or ask someone." Finally, students discussed summarization frequently. One student described his use of summarizing this way, "It helped me review and think about the little details that I might not have seen before, that I might not have regarded as important."

As referenced by the International Literacy Association (2015) and Duke and Pearson (1983; 2002), research literature on reading comprehension supports the effectiveness of reading strategies such as predicting, clarifying, questioning, and summarizing to improve students' comprehension of text. Although this assertion is predominantly found in research literature at the elementary level (Duke & Pearson, 2002; Lubliner, 2004; Oczkus, 2010; 2013; 2017; Palinscar & Brown, 1982; 1983; 1984; 1988), students' interview responses in the present study suggest the reading strategies of predicting, clarifying, questioning, and summarizing may support students' reading comprehension at the secondary level.

To explore students' potential transfer of RT strategies to other disciplines, students were asked if they used RT in other classes, and if so, did they use some or all components of RT. Students indicated they used elements of RT in English class and sometimes in science class. Students discussed using clarifying and summarizing more than predicting and questioning. However, one student mentioned the role background knowledge played in her use of RT, "if I am familiar with something, like if I already

know about a particular topic, I am less apt to need to predict or question or clarify. I might need to just summarize what I am reading so I remember the details." When the student was asked a follow-up question about what they would do if they were unfamiliar with something, the student acknowledged, "using all of the pieces of RT would probably be necessary."

Students were also asked if they would use RT in part or whole in the future. One student said, "I would say probably, because it is helpful. Before I was kind of doing a general dumbed down version of readings. I might only know basics. This was more in-depth." Another student added, "I tended to find reading more enjoyable during the reciprocal teaching time. I read slower. I thought about text before I read it. I didn't miss things. I stopped to figure out what things meant rather than keep going." Finally, one student shared his personal feelings of how RT benefitted his confidence and desire to read, "I felt that I had a purpose…that I knew what I was doing…I cared about doing it."

Students' Motivation to Read

To address the second part of RQ6, the researcher collected and analyzed quantitative data from students' Adolescent Motivation to Read Profile (AMRP; see Appendix X) pretest and posttest responses. The AMRP is comprised of two subscales. The first subscale reflects students' perceived value of reading. The second subscale reflects students' perceived self-concepts as readers. Table 5.5 provides the reliability estimates for the AMRP overall and each of the subscales.

Table 5.5

Adolescent Motivation to Read Profile Pretest and Posttest Reliability Estimates (n = 89)

Scale	Pretest α	Posttest α

Adolescent Motivation to Read Profile (Overall)	0.960	0.976
Adolescent Motivation to Read Profile (Value)	0.930	0.952
Adolescent Motivation to Read Profile (Self-Concept)	0.962	0.979

As displayed in Table 5.5, the reliability of the AMRP overall and each of the subscales are significantly higher than the accepted .80 threshold for internal consistency reflecting strong reliability for this instrument. Figure 5.6 provides the means, SDs, and *p* values for the quantitative portion of the AMRP.

Figure 5.6

Adolescent Motivation to Read Profile Pretest and Posttest Results (n = 98)

	Pretest	Posttest	Paired Samples
	M *(SD)*	M *(SD)*	*p*
Adolescent Motivation to Read Profile (Overall)	53.66 *(8.47)*	55.31 *(8.69)*	*0.011*
Adolescent Motivation to Read Profile (Value)	23.92 *(4.67)*	25.30 *(5.03)*	*0.000*
Adolescent Motivation to Read Profile (Self-Concept)	29.64 *(5.32)*	30.02 *(5.01)*	*0.371*

Note. AMRP Value and AMRP Self-Concept are separate subscales with maximum score of 40.

The researcher conducted a paired sample *t* test of students' pretest ($M = 53.66$, $SD = 8.47$) and posttest ($M = 55.31$, $SD = 8.69$) overall mean motivation to read scores, which indicated a significant difference between the two scores ($t = 2.79$, $p = 0.011$). A comparison of students' pretest ($M = 23.92$, $SD = 4.67$) and posttest ($M = 25.30$, $SD = 5.03$) mean scores regarding students' perceived value of reading social studies text

indicated significant difference between students' preintervention and postintervention perceived value of reading social studies text ($t = 3.95$, $p = 0.000$). A comparison of students' pretest ($M = 29.64$, $SD = 5.32$) and posttest ($M = 30.02$, $SD = 5.01$) mean scores regarding students' perceived self concepts as readers, however, did not reveal a significant difference between students' preintervention and postintervention perceived self-concepts as readers ($t = 0.88$, $p = 0.371$).

Students completed the qualitative portion of the AMRP (see Appendix Y) with the researcher after participating in the RT intervention. The researcher asked students about: (a) general reading habits, (b) narrative reading habits, and (c) informational reading habits (specifically social studies). Student responses affirmed what the research literature revealed in early chapters regarding dominant factors that influence students to read (Van Bergen et al., 2016; Edmunds & Bauserman, 2006; Kamil et al., 2008; Levy et al., 2006; Bradley et al., 2001; Waldfogel, 2006), however, students' responses did not suggest RT impacted students' reading habits in any of these three categories. In addition to frequent references of the role parents, siblings, and friends had on students' reading habits, students discussed their favorite books and literary genres. The few students that cited they were reading in social studies indicated it was more for pleasure than information.

Discussion

This study focused on the effects of a school-based PD program to improve teachers' instructional self efficacy, instructional beliefs, and perceived ability to implement RT in freshmen, college preparatory, social studies classrooms. This chapter

consisted of a discussion of the findings of a mixed methods research study to respond to six research questions.

Teachers highlighted a generally positive view of their PD experience in this study. Overall, teachers commented that the RT PD was among the best PD they experienced in a long time. Teachers strongly agreed they understood each session, found presented material useful, and could apply information in their classrooms as presented by Jane. Teachers enjoyed working together and having each other as a resource through the PD and implementation process. This finding supports research literature suggesting CoPs can strongly influence improvements in teachers' instructional approaches and delivery (Brown et al., 1989; Jackson & Temperley, 2007; Kobett, 2016; Lave & Wenger, 1991; Lovett & Cameron, 2011; Tschannen-Moran & Johnson, 2011). Further, teachers identified activities from the RT PD sessions as interesting and enjoyable. These activities included: (a) reading, (b) role playing, (c) open-ended discussions, (d) watching video clips, and (e) planning as a group. These activities align with statements and suggestions made in the research literature regarding how adults learn most effectively (Dresner & Worley, 2006; Gulamhussein, 2013; Knowles, 1975; Leiberman & Wood, 2002; van Amersfoort et al., 2011).

The researcher and EDC observed teachers during the classroom implementation phase of the RT intervention to ensure that the RT intervention was implemented with fidelity. A high level of agreement existed between the researcher and EDC that teachers introduced RT and implemented each step of RT appropriately with students. Teachers repeatedly indicated Jane's positive influence was a strong factor in their ability to implement RT correctly in their classrooms. This finding supports the belief that

instructional coaches can positively impact teachers' instructional practices through participating in lesson planning and related conversations during the development and implementation of an initiative (Bryk et al., 2015; Desimone & Pak, 2016; Fuller et al., 2013; Gallucci et al., 2010; Tschannen-Moran & Johnson, 2011; Wenger-Treyner & Wenger-Treyner, 2015). The researcher and EDC also observed and scored students' use of RT during the independent part of the implementation portion of the RT process. A high level of agreement existed between the researcher and EDC that most students used each step of RT correctly.

At the conclusion of the RT intervention a significant improvement in teachers' instructional self efficacy, instructional beliefs, and perceived ability to implement RT in their classrooms was realized. This is noteworthy as teachers' preintervention scores demonstrated a slightly negative perception of their ability to instruct and implement literacy strategies with students. This increase in scores were supported by teachers' statements regarding the positive nature of their PD experiences, work with colleagues, and collaboration with Jane during the intervention period. These findings align with the research literature already mentioned in this discussion regarding elements of high quality PD and the impact of instructional coaching, but also supports previous findings about the positive impact a CoP can have on improving instructional practice (Fuller et al., 2013; Lave & Wenger, 1991; Wenger-Treyner & Wenger-Treyner, 2015).

A significant improvement in students' reading comprehension scores was also realized at the conclusion of the intervention period. Students' statements at the end of the RT intervention indicated students did not use a specific approach to read when they completed their pretests. At the conclusion of the intervention period, students indicated

they used a more methodical approach to completing the reading comprehension posttests, including using some or all of the RT steps practiced during the intervention period. These findings support earlier research results discussed in Chapter 3 about students' reading comprehension scores improving after exposure to, and use of, the steps that comprise the RT intervention (Brown et al., 1989; Ozckus, 2010; 2013; 2017; Palinscar & Brown, 1984; 1988; Rosenshine & Meister, 1994).

A significant improvement in students' overall motivation to read social studies text was realized at the conclusion of the intervention period. Of particular note, however, was the finding that of the two subscales that measured students' motivation to read, students' perceptions of the value of reading significantly improved, whereas their self-concepts as readers did not. Students' perceived feelings regarding the value of reading and motivation to read content text increased overall in the same manner as students involved in similar studies by Guthrie and Wigfield (2000) and Wigfield and Tonks (2004). As Pitcher et al. (2004) informs us, students' self -concepts as readers seem to decrease in many students as they get older. Given that adolescents comprise the student participant pool for this study the lack of improvement in perceived self-concepts as readers is not a surprise.

Strengths and Limitations

There were several strengths associated with using a mixed methods design in this study. Perhaps the greatest strength of using quantitative and qualitative data together was that each method compensated for the weaknesses of the other. The quantitative data in this study provided a starting point for deeper exploration about the potential impact the RT PD and implementation may have had on teachers and students. Interview data

created a clearer understanding of the impact the RT PD and implementation may have had on teachers' instructional self efficacy, instructional beliefs, and perceived ability to implement literacy skills in their classrooms, as well as students' motivation to read and comprehend social studies text. Because of the information yielded from the quantitative and qualitative data in this study, triangulation of the data was possible, which strengthened the findings of this study.

Limitations also exist pertaining to the overall findings of this study. As discussed in Chapter 5 the results of this study suggest that the RT PD might have increased teachers' instructional self efficacy, instructional beliefs, and perceived ability to implement RT. The results of this study also suggested that students' motivational levels to engage in content area reading and reading comprehension scores increased after exposure to the RT intervention. Although these findings are promising for future research, (a) the sample size of teachers, (b) threats to internal validity, (c) the limited timeframe of the RT intervention, and (e) lack of control groups need to be addressed.

The small sample of teachers impacts the generalizability of findings from this study. Eight teachers participated in the RT PD with seven continuing on to the implementation phase of the intervention. While this sample size was acceptable for this exploratory study, a larger sample size is needed to generalize findings to other settings. It is also more likely than not that the small sample size of teachers led to lower than acceptable reliability scores on the TSELI and LIBCS preintervention and postintervention surveys.

There was not a control group in this study. As a result, the findings of this study are shared with the understanding that other factors could have influenced students'

results besides the RT intervention. For example, students completed the "Marching to War" reading and assessment at the start and end of the intervention period. Over the course of the intervention period, students could have come into contact with skills or information not related to the RT intervention that could have impacted their scores.

Another potential explanation for the significant differences between students' pretest and posttest results is the potential impact of maturation. Although the intervention was 20 days in length, it is possible students gained experience or knowledge not related to the RT intervention as a result of the passage of time. The "history effect" could have influenced students' scores if discussion of test items took place among students outside of the classroom testing environment between the pretest and posttest period. Test-retest bias could also have influenced students' posttest reading comprehension scores. It is possible students discovered the purpose of the reading comprehension pretest and posttest during the intervention period and simply gave more effort on the posttest. In addition, the same test was used for the reading comprehension pretest as the reading comprehension posttest. It is possible students experienced familiarity with the test questions as they had seen them at the beginning of the intervention period.

Finally, the time frame of the RT intervention was also limited, having occurred over 20 days. The short amount of time for the intervention made it challenging to follow the intervention protocols; however, teachers did an admirable job with their implementation of RT with students. As teachers noted in their statements, the only changes they felt were necessary in the RT PD involved starting in September so that the intervention period could have lasted for the entire year. However, as evidenced in

Chapter 5, the data suggested that the RT PD and subsequent implementation with students had a positive impact on both teachers and students. It is interesting to think about what the data might show if the RT intervention occurred during an entire school year as teachers suggested. Moving forward, this is a possibility at this research site.

Implications for Research and Policy

Overall, this study went very well. Teachers enjoyed the PD on adolescent reading and the use of RT in the social studies classroom, enjoyed working with each other, and appreciated the instructional coaching Jane provided through the duration of the intervention period. The implementation of RT in the classroom and students' use of RT in their groups yielded positive results. This study suggests RT may improve teachers' instructional self efficacy, instructional beliefs, and perceived ability to implement literacy skills (in this case RT). This study also suggests students' use of RT may also improve their reading comprehension and motivation to read. Both of these suggestions are based on the significant differences realized in this study. From the perspective of the researcher, there exists both local and global implications for research and policy moving forward.

At the local level, one direction for future research includes replicating this study at the research site with control groups, as causal statements cannot be made without the use of control groups in research studies. Based on the results of future studies with control groups, and presuming these studies yielded similar results as those contained herein, a second direction for future research is expanding the use of the RT intervention to include teachers and students in social studies classes in grades 10-12. The third direction for future research includes expanding the use of RT in all departments across

the current research site and examining those results. A fourth direction for future research includes starting the conversation within the district regarding the *reading to learn* and *learning to read* transition after fourth grade, and specifically, how it must be addressed (Shanahan, 2008).

One focus area will be on students' self-concepts as readers (Gambrell et al., 1996; Pitcher et al., 2007). The findings of the needs assessment study highlighted students' self-concepts as readers as a significant factor related to whether they read. In this research study there was not a significant difference found in students' self-concepts as readers after exposure to RT. As discussed in Chapter Three, students rapidly lose their desire to read once they enter middle and high school (Gottfreid, 1985; Harter et al., 1992; Kamil et al., 2008). Is this because the text is more content specific or the vocabulary is more difficult? Or is this because students need their teachers to teach them how to specifically read like a practicing professional in different content areas? These are questions for continued study.

Another focus area will be using TRT (Rosenblatt, 1978) to frame how the meaning of text is formed for an individual. In this case, reading comprehension is a culmination of text, reader, and a singular moment in time, coming together to create textual meaning for the reader. The depth of meaning for the reader is dependent upon his or her cognitive ability, strength of basic reading skills, and preexisting knowledge about the subject of the text. In this study, RT provided students with the tools to engage in the transactional processes of reading. Preteaching background information, concepts, and vocabulary, as well as being aware of the level of text being used with students are important considerations as part of the conversations within the community.

These conversations will include all stakeholders in the school community, including administrators, teachers, parents, and students to develop a collective understanding of this issue and what to do to improve it. Developing content area reading skills, as explored in this dissertation, is the conduit for student success at the middle and high school levels and beyond. These discussions will hopefully lead to the development of a K-12 PD and literacy plan to address content-area reading needs of teachers and students in the district. Finally, the last direction for future research on the local level involves creating a body of research across the research site that not only adds to the empirical research on adolescent literacy but also provides research for other educators to create similar changes in their professional contexts.

Globally, the results of this study support the research literature discussed in Chapter Three regarding PD (e.g., Gulamhussein, 2013; Slavin et al., 2008; Yoon et al., 2007), CoPs (e.g., Fuller, Hodkinson, Hodkinson, & Unwin, 2013; Lave & Wenger, 1991; Wenger-Treyner & Wenger-Treyner, 2015), and instructional coaches (e.g., Desimone & Pak, 2016; Gallucci, Van Lare, Yoon, & Boatright, 2010). The PD experiences described in this study were steeped in the principles of andragogy based on the work of Knowles (1976; 1979). In the context of education, teachers are receptive to PD when they understand the rationale for the experience, work with their colleagues, and can immediately implement strategies and routines in their classrooms. These statements are supported in this study.

The teachers' positive PD experiences in this study were extended through the formation of a CoP with instructional coaching support as part of the RT intervention. The use of a CoP is contrary to the "top down" PLC approach employed by many schools

aimed at whole-school improvement (DuFour, 2014; DuFour & Eaker, 1998) . In this study, teachers voluntarily came together seeking a way to improve students' reading comprehension and motivation. Teachers enjoyed the support of colleagues and an instructional coach during implementation of the RT intervention. Teachers discussed at length how influential discussion with their colleagues and their instructional coach was in developing their understanding and confidence to use RT in classrooms without fear of penalty. This study supports the use of CoPs driven by teachers, with administrative support, as another potential method for school improvement.

As the incoming superintendent of schools for this research site, I am conversant in transactional reading theory, effective PD for teachers, the importance of implementation support in classrooms, the benefits of instructional coaching, and the power of RT as an instructional strategy. This knowledge will provide opportunities for me to make a significant instructional impact on the reading development and achievement of students in this district.

More broadly, as a scholar-practicioner, my experiences as a doctoral student at Johns Hopkins has provided me with an understanding of how to approach issues that will arise in my professional context. Identifying the problem, using multiple perspectives to study the problem, designing a solution grounded in research and best practice, and understanding how to evaluate the intervention from design through implementation is an invaluable skill as the head of a school district.

Conclusion

Students in the United States continue to progress into middle and high school in need of remediation because they cannot adequately read and comprehend content area

text. However, many middle and high school teachers do not have the instructional capacity to assist students with their reading deficiencies (Heller & Greenleaf, 2007; Pardo, 2004). This is problematic as students are leaving high school without the appropriate literacy skills to sufficiently read and comprehend various texts in a multitude of disciplines and settings necessary to contribute to the social, civic, and economic needs of a constantly evolving 21st Century society (Shanahan & Shanahan, 2008). As a result, there is a critical shortage of highly literate workers in the United States (Marx, 2014; Porter, 2013). Although concerns regarding secondary literacy achievement spans 40 years (McQuillan, 1998; Wexler, 2018) there is a dearth of research literature available targeted toward this issue (Moje, 2010; Shanahan & Shanahan, 2012). It is incumbent upon me, and others interested in the field of adolescent literacy, to keep growing the empirical literature related to improving adolescent literacy in American secondary schools. Our country desperately needs highly skilled, literate, students and citizens required to move our country forward domestically and on the world stage.

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Appendix A

The Student Motivation to Read Survey

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. I am more likely to read assigned material to prepare for class seminar/discussion participation than for a traditional pen and paper test.					
2. I am more likely to read when the teacher is enthusiastic about the content or the assignment.					
3. I am excited to read if assigned to participate in literature circles/structured discussions of books/texts/reading materials in small groups.					
4. Having a choice over what book(s) or texts I am allowed to read for class makes me more likely to read than if the reading was chosen for me by my teacher.					
5. When my teacher demonstrates specific strategies for reading comprehension, I am more likely to read when specific strategies are not demonstrated.					
6. I am more likely to read assigned material					

for my high school classes if there is a prize or reward attached to the completion of the reading (points, recognition, candy, etc.) than if no prize is attached.					
7. Being assigned a project (artwork, demonstration, presentation, etc.) connected to assigned reading makes me more likely to read the assignment if the project is in addition to or instead of a traditional pen and paper test.					
8. I am more likely to read information that relates to a course if it is delivered in magazines, articles, blogs, other electronic media, etc. than information from the course text book.					
9. I would be more likely to read an assignment for school if the reading assignment were associated with a formal or informal book club than if it were not.					
10. I am more likely to read if I know I will be tested over the material assigned than if there were not test.					
11. I prefer nonfiction (true stories/facts/biographies) reading to fiction (made up stories/fantasy) reading when given the choice.					

12. My teacher's knowledge of assigned subject matter impacts whether or not I read the assignment.					
13. Being provided with adequate time to read assigned texts (either in-class or out-of-class time) is the most important factor in determining whether or not I will read the assigned material.					
14. I am inspired to read something when it is recommended to me by a friend.					
15. It is important that my teachers provide me with a wide variety of reading opportunities (and genres) including magazines, articles, graphics, electronic resources, etc.					
16. Being surveyed by my teachers to determine my personal interests has an effect on my likelihood of reading course content					
17. It is important to me that I am allowed time for reading for pleasure with no assessment attached.					
18. I prefer reading assessments that ask multiple-choice or true/false questions about what happened in the reading instead of questions that ask me to explain my understanding of the					

reading.					
19. I enjoy silent sustained reading time in class.					
20. The most important factor in determining if I will read an assignment is if it is personally meaningful and relevant to my life.					
21. It is part of my teacher's job as an instructor to provide motivation for me to want to read assignments for class.					
22. If the reading assignments in my classes do not interest me, I am unlikely to read them.					
23. My perception of myself as competent or non-competent reader has an effect on my likelihood of reading assigned materials for class.					
24. I am more likely to read assignments for class if I like my instructor than if I do not like my instructor.					
25. I am more likely to read assignments for class if I think that my instructor cares about me than if I think my instructor does not care about me.					
26. I consider reading a waste of time unless I can make some personal connection with or learn a lesson from the reading.					

27. I am more likely to completely read a long assignment, such as a novel, if it is assigned in chapters or chunks rather than having only one due date for the completion of the reading.					

Appendix B

The Teacher Survey of Reading and Motivation

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. My students are more likely to read assigned material to prepare for class seminar/discussion participation than for a traditional pen and paper test.					
2. My students more likely to read when I am enthusiastic about the content or the assignment.					
3. My students are excited to read if assigned to participate in literature circles/structured discussions of books/texts/reading materials in small groups.					
4. Having a choice over what book(s) or texts my students read for class makes them more likely to read than if the reading was chosen for them by me.					
5. When I demonstrate specific strategies for reading comprehension, my students are more likely to read when specific strategies are not demonstrated.					
6. My students are more likely to read assigned material for my class if there is a prize or reward attached to the					

completion of the reading (points, recognition, candy, etc.) than if no prize is attached.					
7. Being assigned a project (artwork, demonstration, presentation, etc.) connected to assigned reading makes my students more likely to read the assignment if the project is in addition to or instead of a traditional pen and paper test.					
8. My students are more likely to read information that relates to a course if it is delivered in magazines, articles, blogs, other electronic media, etc. than information from the course text book.					
10. My students are more likely to read if they know they will be tested on the material assigned than if there were not a test.					
11. My students prefer nonfiction (true stories/facts/biographies) reading to fiction (made up stories/fantasy) reading when given the choice.					
12. My knowledge of assigned subject matter impacts whether or not my students read the assignment.					
13. Being provided with adequate time to read					

assigned texts (either in-class or out-of-class time) is the most important factor in determining whether or not my students will read the assigned material.					
14. My students are inspired to read something when it is recommended by a friend.					
15. It is important that I provide a wide variety of reading opportunities (and genres) including magazines, articles, graphics, electronic resources, etc.					
16. Surveying my students to determine their personal interests has an effect on their likelihood of reading course content.					
17. It is important to students that I allow them time for reading for pleasure with no assessment attached.					
18. My students prefer reading assessments that ask multiple-choice or true/false questions about what happened in the reading instead of questions that ask them to explain their understanding of the reading.					
19. My students enjoy silent sustained reading time in class.					
20. The most important factor in determining if					

my students will read an assignment is if it is personally meaningful and relevant to their life					
21. It is part of my job as an instructor to provide motivation to students to read assignments for class.					
22. If the reading assignments in my classes are not interesting, my students are unlikely to read them.					
23. My perception of my students as competent or non-competent reader has an effect on their likelihood of reading assigned materials for class.					
24. My students are more likely to read assignments for class if they like me than if they do not like me.					
25. My students are more likely to read assignments for class if they think that I care about them than if they think I do not care about them.					
26. My students consider reading a waste of time unless they can make some personal connection with or learn a lesson from the reading.					
27. My students are more likely to completely read a long assignment, such as a novel, if it is assigned in					

chapters or chunks rather than having only one due date for the completion of the reading.					

Appendix C

Teacher Consent Form

Title: The Case of Reading Comprehension for 9th Grade Students in College Preparatory Courses in a Suburban Massachusetts High School

Principal Investigator: (PI): Casey J. Handfield, Principal
Auburn High School via Johns Hopkins University

99 Auburn Street
Auburn, Massachusetts 01501
Phone: (508)832-7711
E-mail: chandfield@auburn.k12.ma.us

Date: March 25, 2015

Teachers,

You are being asked to participate in a project through Johns Hopkins University. The requirements of Johns Hopkins University require you agree to participate in this project.

The PI will explain in detail to you the purpose of this project, the procedures to be used, and the potential benefits and possible risks of participation. You may ask him any questions you have to help you understand the project. A basic explanation of the project is written below. Please read this explanation and discuss with the PI and questions you may have about this project.

If you consent to participate in this project, you will complete one survey to include 49 qualitative and quantitative questions regarding (a) teacher background in reading comprehension instruction, (b) teacher understanding of what motivates students in general, and specifically to read for understanding, and (c) effective professional development practices teachers can employ in their classrooms. There is no grade, reward, or penalty for you to participate in this study.

PURPOSE OF RESEARCH STUDY:

The purpose of this research study is an attempt to improve reading comprehension in 9th grade students. A survey of research literature demonstrates that reading comprehension is lacking in older students across the country. In addition, research literature demonstrates that successful completion of 9th grade determines a student's overall success in completing high school, as well as post-secondary education (technical school, military, college). A major determinant for a student's successful completion of 9th grade is their

ability to read

Title: The Case of Reading Comprehension for 9th Grade Students in College Preparatory Courses in a Suburban Massachusetts High School

PI: Casey J. Handfield

Date: March 25, 2015

for understanding, as this allows them to access content-specific texts of varying types.

A more in-depth review of research literature regarding potential underlying factors that explain a student's lack of reading comprehension ability by the end of 9th grade include (a) teacher background in content-specific literacy instruction, (b) teacher understanding of their role in motivating a student to read, (c) and effective professional development practices teachers can employ in their classrooms to improve reading comprehension.

PROCEDURES

Teachers of students in 9th grade college preparatory classes during the 2015-16 academic year will be provided with a Teacher Informed Consent form to complete. Teachers who agree to participate in the survey will be identified through the return of completed Teacher Informed Consent forms. Teachers will complete the survey at a date and time to be determined. The time required to complete the survey is approximately 20 minutes.

RISKS/DISCOMFORTS

There are no anticipated risks to teachers.

BENEFITS

Results of surveys will be analyzed to (a) teacher background in reading comprehension instruction, (b) teacher understanding of their role in motivating a student, specifically motivating a student to read, (c) and effective professional development practices regarding reading comprehension instruction that teachers can employ in their classrooms. The open-ended questions in the survey may potentially yield areas of interest and potential follow-up by the PI not mentioned in the survey. Teacher results will be utilized to identify gaps in teacher perception regarding (a) teacher background in reading comprehension instruction, (b) teacher understanding of their role in motivating a student, specifically motivating a student to read, (c) and effective professional development practices regarding reading comprehension instruction that teachers can employ in their classrooms. Recognizing gaps is necessary in order to address them.

VOLUNTARY PARTICIPATION AND RIGHT TO WITHDRAW:

Your participation in this study is entirely voluntary. It is your choice whether to participate or not in this study. If you decide not to participate there are no penalties and you will not lose any benefits to which you would otherwise be entitled. If you wish to withdraw from the study please contact the PI via phone or email: (508) 832-7711, chandfield@auburn.k12.ma.us.

Title: Title: The Case of Reading Comprehension for 9th Grade Students in College Preparatory Courses in a Suburban Massachusetts High School

PI: Casey J. Handfield

Date: March 25, 2015

CONFIDENTIALITY

Any study records that identify you will be kept confidential to the extent possibly law. The records from your participation may be reviewed by people responsible for making sure that research is done properly, including members of the Johns Hopkins University.

Homewood Institutional Review Board and officials from government agencies such as the Office for Human Research Protections. (All of these people are required to keep your identity and the identify of your child confidential.) Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records.

All videotapes and measures will be examined by the PI and research affiliates only (including those entities described above). No identifiable information will be included in any reports of the research published or provided to school administration. A participant number will be assigned to all surveys and the student's achievement scores.

Surveys will be collected in either electronic or paper format. Survey data completed electronically will be collected via a password protected Survey Monkey account that belongs to JHU School of Education. If you are unable to complete the surveys electronically, paper copies will be provided. In both electronic and paper format, these data will not include identifiable information.

Video data of the classroom interactions may be transcribed by an outside agent (transcriptionist), who will de-identify all transcripts by deleting all names from the transcript and only a participant number or pseudonym will be included on these transcripts.

All research data including paper surveys and videotapes will be kept in a locked office. Electronic data will be stored on the PI's computer, which is password protected. Any original tapes or electronic files will be erased and paper documents shredded, ten years after collection.

Only group data will be included in publication; no individual achievement data will ever be published.

COMPENSATION

You will not receive any payment or other compensation for participating in this study.

IF YOU HAVE QUESTIONS OR CONCERNS

Title: The Case of Reading Comprehension for 9th Grade Students in College Preparatory Courses in a Suburban Massachusetts High School

PI: Casey J. Handfield

Date: March 25, 2015

You can ask questions about this research study at any time during the study by contacting the PI via phone or email: (508) 832-7711, chandfield@auburn.k12.ma.us. If you have questions about your rights as a research participant or feel that you have not been treated fairly, please call the Homewood Institutional Review Board at Johns Hopkins University at (410) 516-6580.

SIGNATURES

WHAT YOUR SIGNATURE MEANS:

Your signature below means that you understand the information in this consent form.

Your signature also means that you agree to participate in the study.

By signing this consent form, you have not waived any legal rights you otherwise would have as a participant in a research study.

_____

Signature of Teacher **Date**

_____

Signature of Person Obtaining Consent (Casey J. Handfield) **Date**

Appendix D

Parent/Student Informed Assent-Consent Form

Student Participant Code: _____ Instructor Participant Code: _____

Johns Hopkins University

Homewood Institutional Review Board (HIRB)

Parent/Student Informed Assent-Consent Form

Title: The Case of Critical Reading Instruction for 9th Grade Students in College Preparatory Courses in a Suburban Massachusetts High School

Principal Investigator (PI): Casey J. Handfield, Principal
Auburn High School via Johns Hopkins University
99 Auburn Street
Auburn, Massachusetts 01501
Phone: (508)832-7711
E-mail: chandfield@auburn.k12.ma.us

Date:

March 25, 2015

Dear Parent/Guardian,

Your child is being invited to participate in a survey. This survey will measure various aspects of what motivates 9th grade students in general, as well as within the context of reading comprehension. There are 47 items contained in the survey and includes qualitative and quantitative questions. He or she will be asked to respond to a number of multiple-choice items and open-response items designed to determine what strategies and behaviors he or she find motivating in general and motivating regarding their desire to read. There is no grade, reward, or penalty for your child to participate in this study.

PURPOSE OF RESEARCH STUDY

The purpose of this research study is an attempt to increase reading comprehension skills in students who are enrolled in 9th grade college preparatory classes during the 2015-16 academic year utilizing a pre-determined reading strategy. As part of the research study an examination of what motivates 9th grade students, specifically in the area of reading comprehension is being examined. Ninth-grade teachers will

take a similar survey regarding their perceived role in motivating 9th grade students to read, in addition to surveys regarding their perceptions of reading instruction for comprehension in their respective content-area(s) and effective professional development practices.

Title: The Case of Reading Comprehension for 9th Grade Students in College Preparatory Courses in a Suburban Massachusetts High School
PI: Casey J. Handfield
Date: March 25, 2015

PROCEDURES

Parents and students in 9th grade college preparatory classes during the 2015-16 academic year will be provided with Parent/Student Informed Consent forms to complete. Parents and students who agree to participate in the survey will be identified through the return of completed Parent/Student Informed

Consent forms. Students will complete the survey at a date and time to be determined. The survey should take approximately 20 minutes to complete.

RISKS/DISCOMFORTS

There are no anticipated risks to students.

BENEFITS

Results of surveys will be analyzed to determine which strategies and practices are most motivational for high school students in general, and in the context of reading comprehension. The open-ended items may potentially yield more motivational strategies not mentioned in the survey. Student results will be utilized in conjunction with teacher results to identify gaps in teacher and student perception regarding motivation and reading comprehension. Recognizing gaps in teacher and student perception regarding motivation and reading comprehension is necessary in order to address them, as well as to address how motivation impacts a 9th grade student's desire to read for comprehension.

VOLUNTARY PARTICIPATION AND RIGHT TO WITHDRAW

Your child's participation in this study is entirely voluntary. You choose whether to allow your child to participate, and your child will indicate below whether he or she agrees to take part in the study. If you decide not to allow your child to participate, or your child chooses not to participate, there are no penalties, and neither you nor your child will lose any benefits to which you would otherwise be entitled.

You or your child can stop participation in the study at any time, without any penalty or loss of benefits. If you want to withdraw your child from the study, or your child wants to stop participating, please contact the PI via phone or email: (508) 832-7711, chandfield@auburn.k12.ma.us.

CONFIDENTIALITY

Any study records that identify you or your child will be kept confidential to the extent possible by law. The records from your child's participation may be reviewed by people responsible for making sure that research is done properly, including members of the Johns Hopkins University Homewood Institutional Review Board and officials from government

agencies such as the Office for Human Research Protections. (All of these people are required to keep your identity and the identify of your child confidential.) Otherwise, records that identify you or your child will be available only to people working on the study, unless you give permission for other people to see the records.

All videotapes and measures will be examined by the PI and research affiliates only (including those entities described above). No identifiable information will be included in any reports of the research published or provided to school administration. A participant number will be assigned to all surveys and the student's achievement scores.

Surveys will be collected in either electronic or paper format. Survey data completed electronically will be collected via a password protected Survey Monkey account that belongs to JHU School of Education.

If the student is unable to complete the surveys electronically, paper copies will be provided. In both electronic and paper format, these data will not include identifiable information.

Video data of the classroom interactions may be transcribed by an outside agent (transcriptionist), who will de-identify all transcripts by deleting all names from the transcript and only a participant number or pseudonym will be included on these transcripts.

All research data including paper surveys and videotapes will be kept in a locked office. Electronic data will be stored on the PI's computer, which is password protected. Any original tapes or electronic files will be erased, and paper documents shredded, ten years after collection.

Only group data will be included in publication; no individual achievement data will ever be published.

COMPENSATION

Your child will not receive any payment or other compensation for participating in this study.

IF YOU HAVE QUESTIONS OR CONCERNS:

You and your child can ask questions about this research study at any time during the study by contacting the PI via phone or email: (508) 832-7711 OR chandfield@auburn.k12.ma.us. If you [or your child] have questions about your child's rights as a research participant or feel that your child has not been treated fairly, please call the Homewood Institutional Review Board at Johns Hopkins University at (410) 516-6580.

SIGNATURES

WHAT YOUR SIGNATURE MEANS:
Your signature below means that you understand the information in this consent form.

Your signature also means that you agree to allow your child to participate in the study.

Your child's signature indicates that he or she agrees to participate in the study. By signing this consent form, you and your child have not waived any legal rights your child otherwise would have as a participant in a research study

_____

Child's Name

_____

Child's Signature **Date**

_____

Signature of Parent or Legal Guardian **Date**

_____

Signature of Person Obtaining Consent **Date**

Appendix E

Summary of teacher and student means and percentage of sample for survey items

Item	Mean (SD) Teacher (n = 16) Student (n = 26)	Strongly Agree / Agree *n* (%) *n* (%)	Neutral *n* (%) *n* (%)	Disagree/ Strongly Disagree *n* (%) *n* (%)
1. My students are / I am more likely to read assigned material to prepare for class discussions than pen and paper tests.	2.69 (1.14) 3.54 (0.95)	*5* (31.25) *15* (57.70)	*1* (6.250) *6* (23.07)	*10* (62.50) *5* (19.23)
2. My students are / I am more likely to read when I am enthusiastic about the content or the assignment.	4.44 (0.61) 3.85 (0.63)	*15* (93.75) *19* (73.08)	*1* (6.250) *7* (26.92)	*0* (0.000) *0* (0.000)
3. My students are / I am excited to read if assigned to participate in literature circles/structured discussions of reading materials.	3.83 (0.82) 3.75 (0.86)	*10* (62.50) *16* (61.54)	*5* (31.25) *9* (34.62)	*1* (6.25) *1* (03.84)
4. I/My students like to have choice over books I /they read for class because I am/ they are more likely to read them.	3.93 (0.68) 4.31 (0.84)	*12* (75.00) *22* (84.61)	*4* (25.00) *3* (11.54)	*0* (00.00) *1* *(03.85)*
5. When I/my teacher demonstrate(s) specific strategies for reading comprehension, I am/students are more likely to read than if strategies were not demonstrated.	4.00 (0.52) 3.62 (0.80)	*14* (87.50) *17* (65.38)	*2* (12.50) *6* (23.08)	*0* (00.00) *3* (11.54)
6. I am/My students are more likely to read assigned material for my/their classes if there is a reward attached to the completion of the reading than if no reward is attached.	4.06 (0.44) 4.19 (0.85)	*15* (93.75) *21* (80.77)	*1* (06.25) *4* (15.38)	*0* (00.00) *1* (03.85)

7. Being assigned a project connected to assigned reading makes me/my students more likely to read the assignment if the project is in addition to/instead of a traditional pen and paper test.	3.69 (1.01) 3.65 (0.89)	*11* (68.75) *19* (73.08)	*2* (12.50) *4* (15.38)	*3* (18.75) *3* (11.54)
8. I am/ My students are more likely to read information that relates to a course if it is delivered in magazines, articles, blogs, and other electronic media versus a course textbook.	4.00 (0.63) 3.58 (0.70)	*13* (81.25) *16* (61.54)	*3* (18.75) *8* (30.77)	*0* (00.00) *2* (07.69)
9. My students are / I am more likely to read an assignment for class if the reading assignment is associated with an informal / formal book club.	3.12 (0.81) 4.13 (0.71)	*14* (87.50) *8* (30.77)	*1* (06.25) *13* (50.00)	*1* (06.25) *5* (19.23)
10. My students are / I am more likely to read for class if they know they will be tested on the material assigned.	2.94 (0.44) 3.88 (1.21)	*1* (06.25) *19* (73.08)	*13* (81.25) *2* (07.69)	*2* (12.50) *5* (19.23)
11. I/My students prefer nonfiction reading to fiction reading when given a choice.	4.25 (0.68) 3.65 (1.23)	*14* (87.50) *16* (61.54)	*2* (12.50) *4* (15.38)	*0* (00.00) *6* (23.08)
12. My/My teacher's knowledge of assigned subject matter impacts whether or not students/I read the assignment.	2.94 (0.77) 3.04 (1.18)	*4* (25.00) *9* (34.62)	*7* (43.75) *9* (34.62)	*5* (31.25) *8* (30.76)
13. Being provided adequate time to read assigned texts is the most important factor in determining whether or not I / my students will read assigned material.	3.88 (0.62) 3.34 (1.02)	*12* (75.00) *13* (50.00)	*4* (25.00) *9* (34.62)	*0* (00.00) *4* (15.38)
14. I am/My students are inspired to read something when it is recommended by a friend.	3.94 (0.68) 3.92 (0.80)	*12* (75.00) *19* (73.08)	*4* (25.00) *6* (23.08)	*0* (00.00) *1* (03.84)

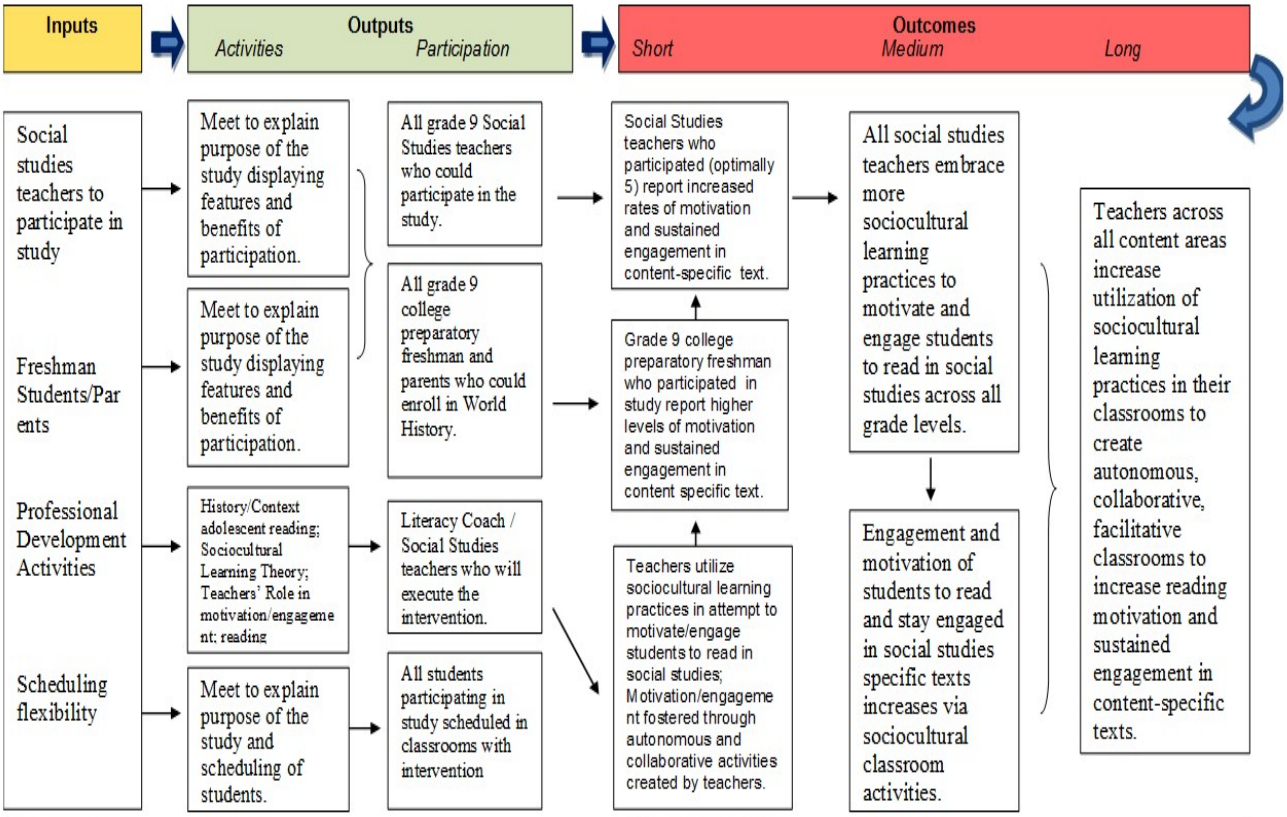
15. It is important that my teachers/I provide me/my students with a variety of reading opportunities including magazines, articles, graphics, electronic, resources, etcetera.	4.00 (0.82) 3.77 (0.91)	*11* (68.75) *19* (73.08)	*5* (31.25) *5* (19.23)	*0* (00.00) *2* (07.69)
16. Being surveyed/Surveying by my teachers/ my students to determine personal interests has an effect on my likelihood to read course content.	3.75 (0.58) 3.35 (0.89)	*13* (81.25) *10* (38.47)	*2* (12.50) *12* (46.15)	*1* (06.25) *4* (15.38)
17. It is important to me/my students that I/they have allowed time for reading for pleasure with no assessment attached.	4.19 (0.54) 3.81 (0.94)	*15* (93.75) *18* (69.23)	*1* (06.25) *5* (19.23)	*0* (00.00) *3* (11.54)
18. My students / I prefer reading assessments that ask multiple-choice or true/false questions about what happened in the reading versus explaining their/my understanding of the reading.	3.31 (0.60) 3.89 (0.82)	*6* (37.50) *19* (73.08)	*9* (56.25) *5* (19.23)	*1* (06.25) *2* (07.69)
19. I / My students enjoy silent sustained reading time in class.	3.06 (0.93) 3.31 (1.15)	*6* (37.50) *10* (38.46)	*6* (37.50) *8* (30.77)	*4* (25.00) *8* (30.77)
20. The most important factor in determining if I/my students will read an assignment is if it is personally meaningful and relevant to my/their life.	3.38 (1.02) 3.35 (0.89)	*9* (56.25) *14* (53.84)	*4* (25.00) *6* (23.08)	*3* (18.75) *6* (23.08)
21. It is part of my job as a teacher / It is part of my teacher's job to provide motivation for my / me students to read in class.	2.81 (0.83) 3.50 (0.91)	*3* (18.75) *14* (53.86)	*8* (50.00) *8* (30.77)	*5* (31.25) *4* (15.38)
22. If the reading assignments in my classes do not interest my/my students, I/they are unlikely to read them.	4.31 (0.87) 3.88 (0.99)	*14* (87.50) *14* (53.84)	*1* (06.25) *6* (23.08)	*1* (06.25) *6* (23.08)

23. My perception of my students / myself as a competent or non-competent readers/reader has an effect on their / my likelihood of reading assigned materials for class.	2.63 (1.08) 3.77 (0.65)	*4* (25.00) *19* (73.07)	*2* (12.50) *6* (23.08)	*10* (62.50) *1* (03.85*)*
24. I am / My students are more likely to read assignments for class if I/ my students like my instructor/me than if I/they do not like my/their instructor.	3.63 (0.81) 3.38 (0.80)	*9* (56.25) *16* (61.54)	*6* (37.50) *8* (30.77)	*1* (06.25) *2* (07.69)
25. My students are / I am more likely to read assignments for class if they / I feel like I/ my teacher care about them versus not caring about them.	4.38 (0.62) 3.62 (1.10)	*15* (93.75) *16* (61.54)	*1* (06.25) *6* (23.08)	*0* (0.000) *4* (15.38)
26. I/My students consider reading a waste of time unless I/they can make a personal connection with or learn a lesson from the reading.	3.62 (0.80) 3.30 (1.25)	*9* (56.25) *11* (42.31)	*7* (43.75) *8* (30.77)	*0* (00.00) *7* (26.92)
27. I am/My students are more likely to completely read a long assignment, such as a novel, if it is assigned in chapters or chunks rather than having only one due date for the completion of the reading.	4.38 (0.72) 3.92 (0.93)	*14* (87.50) *18* (69.23)	*2* (12.50) *6* (23.08)	*0* (00.00) *2* (07.69)

Appendix F

Logic Model

Name: Casey Handfield
Program: RMI II - Logic Model - December 8, 2015
Situation: **Freshman Social Studies Students and Content-Specific Reading – A Theory of Change**



Assumptions
Teachers do not understand the important role they play in motivation.
Teachers do not possess background knowledge of sociocultural learning theory.
Teachers are unaware that sociocultural learning theory's perspective on motivation may unlock an answer to improving adolescent literacy.
Teachers need appropriate professional development to implement this intervention.

External Factors
Adolescent literacy achievement continues to decline in America high schools.
High school graduates are increasingly underprepared for rigor of college/workforce.
A paradigm shift has occurred within the last 15 years to examine adolescent literacy.
New calls for research to improve adolescent literacy through examining needs of students and teachers at secondary levels is dominating field.

Appendix G

Research Question Matrix

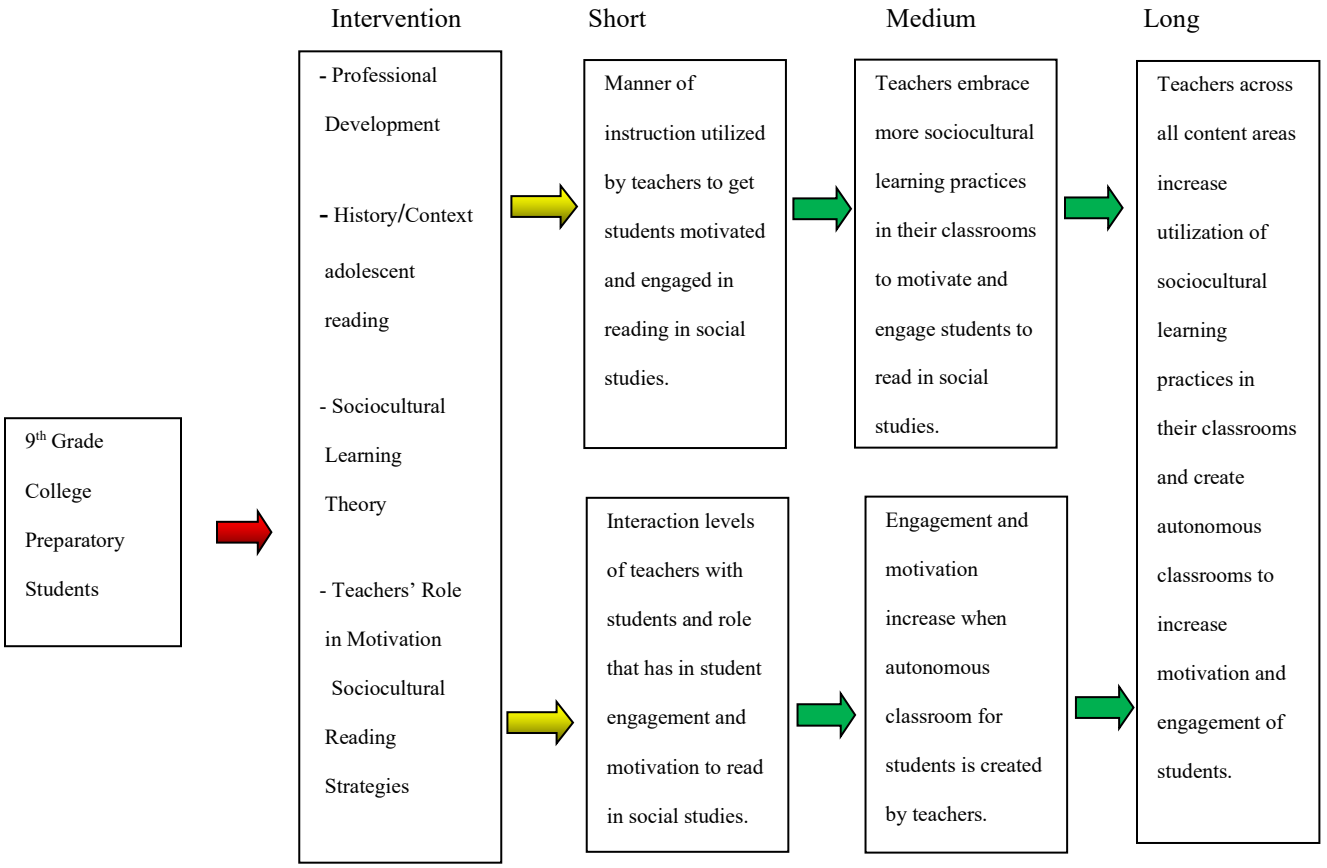
Research Questions (RQ) / Constructs	Instruments/Measures (Items)	Timing	Data Analysis
RQ1: What was the delivered PD and to what extent was it implemented with fidelity?			
Initial/Process Use	RT Interview Protocol (Q#1) (Appendix K)	Beginning -1x	Emergent coding
Program Implementation: Dose and Reach	Post-session surveys of teacher awareness, objective awareness, and usage of materials (Appendix L)	During PD for Teachers - 3x (2nd, 5th, 7th session)	Reporting of frequencies, means, standard deviations
Teacher Responsiveness: Involvement, Participation, Receptivity, Degree of Interpretation,	PD Observer Field Notes (Appendix M)	Observer's assessment of teachers' efforts and interactions during RT PD	Reporting of frequencies, means, standard deviations Emergent Coding
RQ2- What were the teachers' experiences related to completing RT PD?			
Teachers' Perceptions of the Intervention	RT Interview Protocol (#2-4) (Appendix K)	After Teacher PD – 1x	Emergent coding
RQ2a- What did teachers perceive to be the most beneficial aspects of participating in RT-focused PD?			
Beneficial Aspects of RT-focused PD	RT Interview Protocol (#2-3) (Appendix K)	After Teacher PD – 1x	Emergent coding
RQ2b- What suggestions for improvements did teachers have regarding RT-focused PD?			
Suggestions for Improving RT-focused PD	RT Interview Protocol (#4) (Appendix K)	After Teacher PD – 1x	Emergent coding
RQ3 – What were teachers' experiences related to implementing RT in their classrooms?			

Experience Implementing RT in the classroom with students	RT Interview Protocol (#5-7) (Appendix K) Teacher Implementation of Reciprocal Teaching (Appendix O)	Conclusion of Intervention – 1x Observers judgment of introduction, model, and student work completion	Emergent Coding
RQ4- What were the participants' instructional self efficacy, instructional beliefs, and perceived ability to implementing literacy instruction within social studies instruction following the intervention?			
Instructional Self efficacy	Teacher Self efficacy for Literacy Instruction Scale (Appendix P)	Beginning -1x / Conclusion – 1x	Mann-Whitney U test
	RT Interview Protocol (#8-9) (Appendix K)	Conclusion – 1x	Emergent coding
Implementing Literacy Practices with Students and Feelings of Competency	Literacy Instruction Beliefs and Competencies Survey (Appendix Q)	Beginning - 1x / Conclusion - 1x	Mann-Whitney U test
	RT Interview Protocol (#10-13) (Appendix K)	Conclusion – 1x	Emergent coding
RQ5 – How did students use the four components of RT in groups after the teacher implementation period?			
Experience implementing RT in the classroom with peers	Graphic Organizer Assessment Sheets (Appendix U)	Observers' scoring of students' Graphic Organizers 4x each	Reporting of frequencies, means, standard deviations Emergent Coding
RQ6 – What were the effects of RT on students' reading comprehension and motivation to read social studies text?			

Reading Comprehension	Reading "Marching Toward War" (Appendices V and W)	Beginning - 1x /Conclusion - 1x	Paired Samples T-Test Emergent coding
Motivation to Read	Adolescent Motivation to Read Profile- Quantitative (Appendix X) Adolescent Motivation to Read Profile- Qualitative (Appendix Y)	Beginning - 1x / Conclusion – 1x Conclusion - 1x	Paired Samples T-Test Emergent coding

Appendix H

Theory of Treatment



Appendix I

Demographic Survey - Teachers

Participant Code:

Project Name: Reciprocal Teaching in the Social Studies Classroom

Date:

1. Age	
2. Gender	
3. Years Teaching at Present School	
4.Years Teaching Overall	
5. Grade Level(s) Taught	
6. Subject(s) Taught	
7. Literacy Trainings Completed	

Thank you for taking the time to complete this survey. All answers will remain confidential.

Appendix J

Demographic Survey - Students

Participant Code:

Project Name: Reciprocal Teaching in the Social Studies Classroom

Date:

1. Age	
2. Gender	
3. Years in public school system	
4.Years in current high school	

Thank you for taking the time to complete this survey. All answers will remain confidential.

Appendix K

Reciprocal Teaching in the Social Studies Classroom Interview Protocol

Participant Code: _____

Introduction protocol

Thank you for taking the time to talk with me about your participation in the Reciprocal Teaching in the Social Studies Classroom. I am interviewing participants of this project to better understand their experience in the professional development program. Please answer the following questions as honestly as possible. Thank you for your time.

Before we start, a few disclosures:

- Your participation in this study is voluntary. You have the right to be a part of this study, to choose not to participate, or to stop participating at any time.
- This interview will be recorded to have a complete record of our discussion. Is that okay with you?
- All content of our conversation will be kept confidential as well as reported in an anonymous manner in the final dissertation.

There are several sections to the interview. The goal is to capture authentic examples of your experience in this study and allow you to elaborate on your opinions in a discussion. Do you have any questions before we begin?

(Initial Use and Process Use)

1) Please describe your use of RT PD intervention-related activities during and after the intervention. Also, do you plan to use any related-activities and strategies in the future?

    1a) In case the participant is not able to answer the question with specific examples, the following list of activities will be used to stimulate the participants' responses: predicting, questioning, clarifying, and summarizing.

(Teachers Perceptions Related to Completing RT PD)

2- What components of the RT PD do you think had the greatest value to support you to use Reciprocal Teaching to support the development of student literacy skills in your content-area? What components had the least value?

3- On a scale ranging from 1 (*Strongly Dissatisfied*) to 5 (*Strongly Satisfied*), how would you rate the RT intervention? Please explain your rating.

(Teachers Suggestions for Improvements for the Professional Development Program)

4- What suggestions for improvements do you have for the Reciprocal Teaching PD and intervention and why?

(Teacher Experiences Implementing RT In the Classroom)

5-What components of RT had the greatest value in supporting the development of student literacy skills in your class? What components had the least value?

6 - On a scale ranging from 1 (*Strongly Dissatisfied*) to 5 (*Strongly Satisfied*), how would you rate the usefulness of RT for improving students' motivation and ability to read content area material? Please explain your rating.

(Teachers Suggestions for Improvements of Implementing RT)

7 - How would you alter the implementation of RT next time? Why?

(Self efficacy)

8 -Can you talk about your confidence with instructing students in content-area literacy practices? What influences your confidence and why?

9- Can you explain the ways in which the Reciprocal Teaching PD influenced your confidence to support student literacy skills in your content-area? Why do you think the PD had this effect?

(Instructional Competency)

10) What effect, if any, did the PD program have on your literacy instruction proficiency to support student literacy skills in your content-area? Why do you think it had this effect?

(Instructional Beliefs)

11) Tell me how you think about using literacy instruction to support student learning, especially student literacy skills in your content-area.

12) What would you describe as the major factors influencing your integration of literacy

skills in your instruction to support student learning?

13) In what ways, if any, did the PD program support you to integrate literacy instruction to support student learning? Why do you think it had this effect?

Appendix L

Reach and Dose Surveys

Participant Code: _____

Thank you for participating in today's session on Reciprocal Teaching in the Social Studies Classroom. Please take a moment to provide feedback on today's session. Your opinions will assist us in understanding your experience and improve future sessions.

Session 2: Introduction to Implementing Reciprocal Teaching with Students

	Strongly Disagree				Strongly Agree
1) The program purpose for this session was clear.	1	2	3	4	5
2) I understood the purpose of this session.	1	2	3	4	5
3) I found the information in this session useful.	1	2	3	4	5
4) I feel confident I can apply the knowledge from this session in my classroom.	1	2	3	4	5
5) I have already used information related to this session in my classroom.	1	2	3	4	5

Session 5: Understanding the Third Step in Reciprocal Teaching: Clarifying

	Strongly Disagree				Strongly Agree
1) The program purpose for this session was clear.	1	2	3	4	5
2) I understood the purpose of this session.	1	2	3	4	5
3) I found the information in this session useful.	1	2	3	4	5
4) I feel confident I can apply the knowledge	1	2	3	4	5

from this session in my classroom.					
5) I have already used information related to this session in my classroom.	1	2	3	4	5

Session 7: Review and Model Implementation of Reciprocal Teaching

	Strongly Disagree				Strongly Agree
1) The program purpose for this session was clear.	1	2	3	4	5
2) I understood the purpose of this session.	1	2	3	4	5
3) I found the information in this session useful.	1	2	3	4	5
4) I feel confident I can apply the knowledge from this session in my classroom.	1	2	3	4	5
5) I have already used information related to this session in my classroom.	1	2	3	4	5
6) Have you been exposed to any other content-area literacy PD program or any outside content-area literacy professional learning opportunities since September?	Yes			No	

Appendix M

PD Observer's Field Notes

Participant Code:	Project Name:	School Code:
Researcher:	Date:	Field Observer:

RT Strategy	Attendance	Participation	Assignment Completion
Overview Adolescent Literacy			
Overview of Reciprocal Teaching			
Predicting			
Questioning			
Clarifying			
Summarizing			
Review			

Notes:

Appendix N

"United States Economic Imperialism"

SETTING THE STAGE

Latin America's long struggle to gain independence from colonial domination between the late 18th and the mid-19th centuries left the new nations in shambles. Farm fields had been neglected and were overrun with weeds. Buildings in many cities bore the scars of battle. Some cities had been left in ruins. The new nations of Latin America faced a struggle for economic and political recovery that was every bit as difficult as their struggle forindependence had been.

Latin America After Independence

Political independence meant little for most citizens of the new Latin American nations. The majority remained poor laborers caught up in a cycle of poverty.

Colonial Legacy

Both before and after independence, most Latin Americans worked for large landowners. The employers paid their workers with vouchers that could be used only at their own supply stores. Since wages were low and prices were high, workers went into debt. Their debt accumulated and passed from one generation to the next. In this system known as peonage, "free" workers were little better than slaves. Landowners, on the other hand, only got wealthier after independence. Many new Latin American governments took over the lands owned by native peoples and by the Catholic Church. Then they put those lands up for sale. Wealthy landowners were the only people who could afford to buy them, and they snapped them up. But as one Argentinean newspaper reported, "Their greed for land does not equal their ability to use it intelligently." The unequal distribution of land and the landowners' inability to use it effectively combined to prevent social and economic development in Latin America.

Political Instability

Political instability was another widespread problem in 19th-century Latin America. Many Latin American army leaders had gained fame and power during their long struggle for independence. They often continued to assert their power. They controlled the new nations as military dictators, or **caudillos** (kaw•DEEL•yohz). They were able to hold on to power because they were backed by the military. By the mid-1800s, nearly all the countries of Latin America were ruled by caudillos. One typical caudillo was Juan Vicente Gómez.

U.S. Economic Imperialism

He was a ruthless man who ruled Venezuela for nearly 30 years after seizing power in 1908. "All Venezuela is my cattle ranch," he once boasted. There were some exceptions, however. Reform-minded presidents, such as Argentina's Domingo Sarmiento, made strong commitments to improving education. During Sarmiento's presidency, between 1868 and 1874, the number of students in Argentina doubled. But such reformers usually did not stay in office long. More often than not, a caudillo, supported by the army, seized control of the government.The caudillos faced little opposition. The wealthy landowners

usually supported them because they opposed giving power to the lower classes. In addition, Latin Americans had gained little experience with democracy under European colonial rule. So, the dictatorship of a caudillo did not seem unusual to them. But even when caudillos were not in power, most Latin Americans still lacked a voice in the government. Voting rights—and with them, political power—were restricted to the relatively few members of the upper and middle classes who owned property or could read.

Economies Grow Under Foreign Influence
When colonial rule ended in Latin America in the early 1800s, the new nations were no longer restricted to trading with colonial powers. Britain and, later, the United States became Latin America's main trading partners.

Old Products and New Markets
Latin America's economies continued to depend on exports, no matter whom they were trading with. As during the colonial era, each country concentrated on one or two products. With advances in technology, however, Latin America's exports grew. The development of the steamship and the building of railroads in the 19th century, for example, greatly increased Latin American trade. Toward the end of the century, the invention of refrigeration helped increase Latin America's exports. The sale of beef, fruits and vegetables, and other perishable goods soared. But foreign nations benefited far more from the increased trade than Latin America did. In exchange for their exports, Latin Americans imported European and North American manufactured goods. As a result, they had little reason to develop their own manufacturing industries. And as long as Latin America remained unindustrialized, it could not play a leading role on the world economic stage.

Outside Investment and Interference
Furthermore, Latin American countries used little of their export income to build roads, schools, or hospitals. Nor did they fund programs that would help them become self-sufficient. Instead, they often borrowed money at high interest rates to develop facilities for their export industries. Countries such as Britain, France, the United States, and Germany were willing lenders. The Latin American countries often were unable to pay back their loans, however. In response, foreign lenders sometimes threatened to collect the debt by force. At other times, they threatened to take over the facilities they had funded. In this way, foreign companies gained control of many Latin American industries. This began a new age of economic colonialism in Latin America.

A Latin American Empire
Long before the United States had any economic interest in Latin American countries, it realized that it had strong links with its southern neighbors. Leaders of the United States were well aware that their country's security depended on the security of Latin America.

The Monroe Doctrine Most Latin American colonies had gained their independence by the early 1800s. But their position was not secure. Many Latin Americans feared that European countries would try to reconquer the new republics. The United States, a young nation itself, feared this too. So, in 1823, President James Monroe issued what

came to be called the Monroe Doctrine. This document stated that "the American continents . . . are henceforth not to be considered as subjects for future colonization by any European powers." Until 1898, though, the United States did little to enforce the Monroe Doctrine. Cuba provided a real testing ground.

Cuba Declares Independence

The Caribbean island of Cuba was one of Spain's last colonies in the Americas. In 1868, Cuba declared its independence and fought a ten-year war against Spain. In 1878, with the island in ruins, the Cubans gave up the fight. But some Cubans continued to seek independence from Spain. In 1895, José Martí, a writer who had been exiled from Cuba by the Spanish, returned to launch a second war for Cuban independence. Martí was killed early in the fighting, but the Cubans battled on. By the mid-1890s, the United States had developed substantial business holdings in Cuba. Therefore it had an economic stake in the fate of the country. In addition, the Spanish had forced many Cuban civilians into concentration camps. Americans objected to the Spanish brutality. In 1898, the United States joined the Cuban war for independence. This conflict, which became known as the Spanish-American War, lasted about four months. U.S. forces launched their first attack not on Cuba but on the Philippine Islands, a Spanish colony thousands of miles away in the Pacific. Unprepared for a war on two fronts, the Spanish military quickly collapsed.

In 1901, Cuba became an independent nation, at least in name. However, the United States installed a military government and continued to exert control over Cuban affairs. This caused tremendous resentment among many Cubans, who had assumed that the United States' aim in intervening was to help Cuba become truly independent. The split that developed between the United States and Cuba at this time continues to keep these close neighbors miles apart more than a century later. After its defeat in the Spanish-American War, Spain turned over the last of its colonies. Puerto Rico, Guam, and the Philippines became U.S. territories. Having become the dominant imperial power in Latin America, the United States next set its sights on Panama.

Connecting the Oceans

Latin Americans were beginning to regard the United States as the political and economic "Colossus of the North." The United States was a colossus in geographic terms too. By the 1870s, the transcontinental railroad connected its east and west coasts. But land travel still was time-consuming and difficult. And sea travel between the coasts involved a trip of about 13,000 miles around the tip of South America. If a canal could be dug across a narrow section of Central America, however, the coast-to-coast journey would be cut in half. The United States had been thinking about such a project since the early 19th century. In the 1880s, a French company tried—but failed—to build a canal across Panama. Despite this failure, Americans remained enthusiastic about the canal. And no one was more enthusiastic than President Theodore Roosevelt, who led the nation from 1901 to 1909. In 1903, Panama was a province of Colombia. Roosevelt offered that country $10 million plus a yearly payment for the right to build a canal. When the Colombian government demanded more money, the United States responded by encouraging a revolution in Panama. The Panamanians had been trying to break away from Colombia for almost a century. In 1903, with help from the United States Navy, they won their country's

independence. In gratitude, Panama gave the United States a ten-mile-wide zone in which to build a canal. For the next decade, American engineers contended with floods and withering heat to build the massive waterway. However, their greatest challenge was the disease-carrying insects that infested the area. The United States began a campaign to destroy the mosquitoes that carried yellow fever and malaria, and the rats that carried bubonic plague. The effort to control these diseases was eventually successful. Even so, thousands of workers died during construction of the canal. The

Panama Canal finally opened in 1914. Ships from around the world soon began to use it. Latin America had become a crossroads of world trade. And the United States controlled the tollgate. The Roosevelt Corollary The building of the Panama Canal was only one way that the United States expanded its influence in Latin America in the early 20th century. Its presence in Cuba and its large investments in many Central and South American countries strengthened its foothold. To protect those economic interests, in 1904, President Roosevelt issued a corollary, or extension, to the Monroe Doctrine. The Roosevelt Corollary gave the United States the right to be “an international police power” in the Western Hemisphere. The United States used the Roosevelt Corollary many times in the following years to justify U.S. intervention in Latin America. U.S. troops occupied some countries for decades. Many Latin Americans protested this intervention, but they were powerless to stop their giant neighbor to the north. The U.S. government simply turned a deaf ear to their protests. It could not ignore the rumblings of revolution just over its border with Mexico, however. You will learn about this revolution in Section 4.

Appendix O

Teacher Implementation of Reciprocal Teaching Rubric

Participant Code:	Project Name:	School Code:
Researcher:	Date:	Field Observer:

RT Strategy	Presentation to students	Practice with Students	Student Use (HW)
Overview			
Preview			
Question			
Clarification			
Summary			

Notes:

Appendix P

Teacher Self efficacy and Literacy Instruction Scale

Directions: Please indicate your opinion about each of the following questions by marking any of the nine responses in the answer sheet, ranging from (1) “NEVER” to (9) “A LOT”. Please respond to each of the questions by considering the combination of your current ability, resources, and opportunity to do each of the following in your present position.

Item	Never		Little		Sometimes		Frequently		A Lot
1. To what extent can you use a student’s oral reading mistakes as an opportunity to teach effective reading strategies?	1	2	3	4	5	6	7	8	9
2. To what extent can you use a variety of informal and formal reading assessment strategies?	1	2	3	4	5	6	7	8	9
3. To what extent can you adjust reading strategies based on ongoing informal assessments of your	1	2	3	4	5	6	7	8	9

students?									
4. To what extent can you provide specific, targeted feedback to students' during oral reading?	1	2	3	4	5	6	7	8	9
5. How much can you do to meet the needs of struggling readers?	1	2	3	4	5	6	7	8	9
6. To what extent can you provide your students with opportunities to apply their prior knowledge to reading tasks?	1	2	3	4	5	6	7	8	9
7. To what extent can you help your students monitor their own use of reading strategies?	1	2	3	4	5	6	7	8	9
8. To what extent can you get	1	2	3	4	5	6	7	8	9

students to read fluently during oral reading?									
9. To what extent can you model effective reading strategies?	1	2	3	4	5	6	7	8	9
10. To what extent can you implement effective reading strategies in your classroom?	1	2	3	4	5	6	7	8	9
11. To what extent can you help your students figure out unknown words when they are reading?	1	2	3	4	5	6	7	8	9
12. To what extent can you use flexible grouping to meet individual student needs for reading instruction?	1	2	3	4	5	6	7	8	9

13. How much can you motivate students who show low interest in reading?	1	2	3	4	5	6	7	8	9

Appendix Q

Literacy Instruction Beliefs and Competencies Survey

Participant Code:	**Project Name:**
_____	Reciprocal Teaching in the World History Classroom

Please complete the following survey based on your teaching experience and the instructions contained in each section. It is important to answer questions as honestly as possible. Thank you for your time.

Literacy Instructional Practices

Please indicate your agreement with each of the following statements by marking the appropriate box.

Literacy Integration Practices

		Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1.	I integrate literacy activities into the curriculum.				
2.	Literacy activities plays an integral role in supporting content learning in my class.				
3.	I encourage students to work collaboratively on literacy-based activities.				
4.	I locate and evaluate literacy activities for use with my students.				
5.	I require students to use a variety of literacy activities to support their learning.				
6.	I use reading activities to support project- and problem-based learning in my classroom.				

7.	I use literacy activities in my classroom to help support the state curricular standards.				
8.	Literacy instruction helps me meet the individual needs of a variety of students in my classroom.				
9.	I encourage my students to use reading strategies to demonstrate their knowledge of content in non-traditional ways (e.g. web sites, multimedia products).				
10.	I use reading strategies to design new learning experiences for students.				

Appendix R

Role Sheets for RT

1- As the Predictor, I lead the group in doing the following:

- Previewing the book's front and back cover and discussing what the book is about.
- Looking through the book's illustrations and discussing them and discussing what the book is about.
- If not a book, use cues from pictures, headings, charts, tables or other visuals to make some predictions about what the text is about.
- Develop a rationale for your predictions using any cues used to support your claim.

Discussion Points

Our predictions are . . .

The prediction clues we used were . . .

2- As the Questioner, I lead the group in doing the following:

- Reading and rereading text looking for part of the text that can be turned into questions.
- Ask questions that begin with *who, what, when, where, when, why, how, what if…*
- Ask a main idea question
- Finding the answers to questions in the reading
- Ask on inferential question and be able to cite clues used from the text and experiences to for question and answer.

Discussion Points

Our questions are . . .

3- As the Clarifier, I lead the group in identifying and thinking about confusing parts of the reading:

- Reread the text, looking for difficult words or parts of the text not understood.
- Use at least two ways to clarify difficult ideas. Reread. Read on. Identify what is known. Talk with a friend.
- Reread the text and identify what words are difficult.
- Identify ways to understand the difficult words.
- Look at chunks of text that is understood. Try to think about what it means in context.

Discussion Points

A difficult word or idea we found is…

Here is how we tried to figure out the word or idea . . .

4- As the Summarizer, I lead the group in the following . . .

- Looking quickly through the text and illustrations for main ideas. Reread quickly if needed.
- Use our own words to summarize what we read.
- Summarize the important point in the right order.
- Use words such as *first, next, then,* or *finally.*

Discussion Points

Our summary is . . .

Appendix S

"Turmoil and Change in Mexico"

SETTING THE STAGE

The legacy of Spanish colonialism and long-term political instability that plagued the newly emerging South American nations caused problems for Mexico as well. Mexico, however, had a further issue to contend with—a shared border with the United States. The "Colossus of the North," as the United States was known in Latin America, wanted to extend its territory all the way west to the Pacific Ocean. But most of the lands in the American Southwest belonged to Mexico.

Santa Anna and the Mexican War

During the early 19th century, no one dominated Mexican political life more than Antonio López de Santa Anna. Santa Anna played a leading role in Mexico's fight for independence from Spain in 1821. In 1829, he fought against Spain again as the European power tried to regain control of Mexico. Then, in 1833, Santa Anna became Mexico's president. One of Latin America's most powerful caudillos, Santa Anna was a clever politician. He would support a measure one year and oppose it the next if he thought that would keep him in power. His policy seemed to work. Between 1833 and 1855, Santa Anna was Mexico's president four times. He gave up the presidency twice, however, to serve Mexico in a more urgent cause—leading the Mexican army in an effort to retain the territory of Texas.

The Texas Revolt

In the 1820s, Mexico encouraged American citizens to move to the Mexican territory of Texas to help populate the country. Thousands of English-speaking colonists, or Anglos, answered the call. In return for inexpensive land, they pledged to follow the laws of Mexico. As the Anglo population grew, though, tensions developed between the colonists and Mexico over several issues, including slavery and religion. As a result, many Texas colonists wanted greater self government. But when Mexico refused to grant this, Stephen Austin, a leading Anglo, encouraged a revolt against Mexico in 1835.

Santa Anna led Mexican forces north to try to hold on to the rebellious territory.He won a few early battles, including a bitter fight at the Alamo, a mission in San Antonio. However, his fortunes changed at the Battle of San Jacinto. His troops were defeated and he was captured. Texan leader Sam Houston released Santa Anna after he promised to respect the independence of Texas. When Santa Anna returned to Mexico in 1836, he was quickly ousted from power.

War and the Fall of Santa Anna

Santa Anna regained power, though, and fought against the United States again. In 1845, the United States annexed Texas. Outraged Mexicans considered this an act of aggression. In a dispute over the border, the United States invaded Mexico. Santa Anna's army fought valiantly, but U.S. troops defeated them after two years of war. In 1848, the two nations signed the Treaty of Guadalupe Hidalgo. The United States received the northern third of what was then Mexico, including California and the American Southwest. Santa Anna went

into exile. He returned as dictator one final time, however, in 1853. After his final fall, in 1855, he remained in exile for almost 20 years. When he returned to Mexico in 1874, he was poor, blind, powerless, and essentially forgotten.

Juárez and *La Reforma*

During the mid-19th century, as Santa Anna's power rose and fell, a liberal reformer, Benito Juárez (HWAHR•ehz), strongly influenced the politics of Mexico. Juárez was Santa Anna's complete opposite in background as well as in goals. Santa Anna came from a well-off Creole family. Juárez was a poor Zapotec Indian who was orphaned at the age of three. While Santa Anna put his own personal power first, Juárez worked primarily to serve his country.

Juárez Rises to Power

Ancestry and racial background were important elements of political power and economic success in 19th-century Mexico. For that reason, the rise of Benito Juárez was clearly due to his personal leadership qualities. Juárez was raised on a small farm in the Mexican state of Oaxaca. When he was 12, he moved to the city of Oaxaca. He started going to school at age 15, and in 1829, he entered a newly opened state-run university. He received a law degree in 1831. He then returned to the city of Oaxaca, where he opened a law office. Most of his clients were poor people who could not otherwise have afforded legal assistance. Juárez gained a reputation for honesty, integrity, hard work, and good judgment. He was elected to the city legislature and then rose steadily in power. Beginning in 1847, he served as governor of the state of Oaxaca.

Juárez Works for Reform

Throughout the late 1840s and early 1850s, Juárez worked to start a liberal reform movement. He called this movement *La Reforma*. Its major goals were redistribution of land, separation of church and state, and increased educational opportunities for the poor. In 1853, however, Santa Anna sent Juárez and other leaders of *La Reforma* into exile. Just two years later, a rebellion against Santa Anna brought down his government. Juárez and other exiled liberal leaders returned to Mexico to deal with their country's tremendous problems. As in other Latin American nations, rich landowners kept most other Mexicans in a cycle of debt and poverty. Liberal leader Ponciano Arriaga described how these circumstances led to great problems for both poor farmers and the government. Not surprisingly, Arriaga's ideas and those of the other liberals in government threatened most conservative upper-class Mexicans. Many conservatives responded by launching a rebellion against the liberal government in 1858. They enjoyed some early successes in battle and seized control of Mexico City. The liberals kept up the fight from their headquarters in the city of Veracruz. Eventually the liberals gained the upper hand and, after three years of bitter civil war, they defeated the rebels. Juárez became president of the reunited country after his election in 1861.

The French Invade Mexico

The end of the civil war did not bring an end to Mexico's troubles, though. Exiled conservatives plotted with some Europeans to reconquer Mexico. In 1862, French ruler Napoleon III responded by sending a large army to Mexico. Within 18 months, France had

taken over the country. Napoleon appointed Austrian Archduke Maximilian to rule Mexico as emperor. Juárez and other Mexicans fought against French rule. After five years under siege, the French decided that the struggle was too costly. In 1867, Napoleon ordered the army to withdraw from Mexico. Maximilian was captured and executed. Juárez was reelected president of Mexico in 1867. He returned to the reforms he had proposed more than ten years earlier. He began rebuilding the country, which had been shattered during years of war. He promoted trade with foreign countries, the opening of new roads, the building of railroads, and the establishment of a telegraph service. He set up a national education system separate from that run by the Catholic Church. In 1872, Juárez died of a heart attack. But after half a century of civil strife and chaos, he left his country a legacy of relative peace, progress, and reform.

Porfirio Díaz and "Order and Progress"

Juárez's era of reform did not last long, however. In the mid- 1870s, a new caudillo, Porfirio Díaz, came to power. Like Juárez, Díaz was an Indian from Oaxaca. He rose through the army and became a noted general in the civil war and the fight against the French. Díaz expected to be rewarded with a government position for the part he played in the French defeat. Juárez refused his request, however. After this, Díaz opposed Juárez. In 1876, Díaz took control of Mexico by ousting the president. He had the support of the military, whose power had been reduced during and after the Juárez years. Indians and small landholders also supported him, because they thought he would work for more radical land reform. During the Díaz years, elections became meaningless. Díaz offered land, power, or political favors to anyone who supported him. He terrorized many who refused to support him, ordering them to be beaten or put in jail. Using such strong-arm methods, Díaz managed to remain in power until 1911. Over the years, Díaz used a political slogan adapted from a rallying cry of the Juárez era. Juárez had called for "Liberty, Order, and Progress." Díaz, however, wanted merely "Order and Progress." Díaz's use of dictatorial powers ensured that there was order in Mexico. But the country saw progress under Díaz too. Railroads expanded, banks were built, the currency stabilized, and foreign investment grew. Mexico seemed to be a stable, prospering country. Appearances were deceiving, however. The wealthy acquired more and more land, which they did not put to good use. As a result, food costs rose steadily. Most Mexicans remained poor farmers and workers, and they continued to grow poorer.

Revolution and Civil War

In the early 1900s, Mexicans from many walks of life began to protest Díaz's harsh rule. Idealistic liberals hungered for liberty. Farm laborers hungered for land. Workers hungered for fairer wages and better working conditions. Even some of Díaz's handpicked political allies spoke out for reform. A variety of political parties opposed to Díaz began to form. Among the most powerful was a party led by Francisco Madero.

Madero Begins the Revolution

Born into one of Mexico's ten richest families, Francisco Madero was educated in the United States and France. He believed in democracy and wanted to strengthen its hold in Mexico. Madero announced his candidacy for president of Mexico early in 1910. Soon

afterward, Díaz had him arrested. From exile in the United States, Madero called for an armed revolution against Díaz. The Mexican Revolution began slowly. Leaders arose in different parts of Mexico and gathered their own armies. In the north, Francisco "Pancho" Villa became immensely popular. He had a bold Robin Hood policy of taking money from the rich and giving it to the poor. South of Mexico City, another strong, popular leader, Emiliano Zapata, raised a powerful revolutionary army. Like Villa, Zapata came from a poor family. He was determined to see that land was returned to peasants and small farmers. He wanted the laws reformed to protect their rights. *"Tierra y Libertad"* ("Land and Liberty") was his battle cry. Villa, Zapata, and other armed revolutionaries won important victories against Díaz's army. By the spring of 1911, Díaz agreed to step down. He called for new elections.

Mexican Leaders Struggle for Power

Madero was elected president in November 1911. However, his policies were seen as too liberal by some and not revolutionary enough by others. Some of those who had supported Madero, including Villa and Zapata, took up arms against him. In 1913, realizing that he could not hold on to power, Madero resigned. The military leader General Victoriano Huerta then took over the presidency. Shortly after, Madero was assassinated, probably on Huerta's orders. Huerta was unpopular with many people, including Villa and Zapata. These revolutionary leaders allied themselves with Venustiano Carranza, another politician who wanted to overthrow Huerta. Their three armies advanced, seizing the Mexican countryside from Huerta's forces and approaching the capital, Mexico City. They overthrew Huerta only 15 months after he took power. Carranza took control of the government and then turned his army on his former revolutionary allies. Both Villa and Zapata continued to fight. In 1919, however, Carranza lured Zapata into a trap and murdered him. With Zapata's death, the civil war also came to an end. More than a million Mexicans had lost their lives.

The New Mexican Constitution

Carranza began a revision of Mexico's constitution. It was adopted in 1917. A revolutionary document, that constitution is still in effect today. As shown in the chart above, it promoted education, land reforms, and workers' rights. Carranza did not support the final version of the constitution, however, and in 1920, he was overthrown by one of his generals, Alvaro Obregón. Although Obregón seized power violently, he did not remain a dictator. Instead, he supported the reforms the constitution called for, particularly land reform. He also promoted public education. Mexican public schools taught a common language— Spanish—and stressed nationalism. In this way, his policies helped unite the various regions and peoples of the country. Nevertheless, Obregón was assassinated in 1928. The next year, a new political party, the Institutional Revolutionary Party (PRI), arose. Although the PRI did not tolerate opposition, it initiated an ongoing period of peace and political stability in Mexico. While Mexico was struggling toward peace, however, the rest of the world was on the brink of war.

Appendix T

Graphic Organizers for RT Activity

Name: _____

Strategy	Notes
Predict Make three predictions from the text before sharing with the group.	1 2 3
Question Ask three questions about the text before sharing with the group.	1 2 3
Clarify What are three ideas / words you need clarified	1 2 3
Summarize Create a summary in your words of the text.	1 2 3

Appendix U

Graphic Organizer Assessment Sheet

Strategy Students are using the correct words/phrases for each strategy with textual relevance.	All the time (Three times)	Most of the time (Two times)	Some of the time (One Time)	None of the time (Zero Times)
Predicting	4	3	2	1
I think…				
I bet…				
I wonder…				
I imagine…				
I suppose…				
I predict…				
Questioning	4	3	2	1
Who…				
What…				
When…				
Where…				
Why…				
How…				
What if…				
Notes:				
Clarifying	4	3	2	1

I…				
Didn't understand, so I…				
Can't make sense of this, so I…				
Can't figure out, so I…				
Summarizing	4	3	2	1
First,				
Next,				
Then,				
Finally,				
In correct order.				
Notes:				

Appendix V

"Marching Toward War"

Setting the Stage

At the turn of the 20th century, the nations of Europe had been largely at peace with one another for nearly 30 years. This was no accident. Efforts to outlaw war and achieve a permanent peace had been gaining momentum in Europe since the middle of the 19th century. By 1900, hundreds of peace organizations were active. In addition, peace congresses convened regularly between 1843 and 1907. Some Europeans believed that progress had made war a thing of the past. Yet in a little more than a decade, a massive war would engulf Europe and spread across the globe.

Rising Tensions in Europe

While peace and harmony characterized much of Europe at the beginning of the 1900s, there were less visible—and darker—forces at work as well. Below the surface of peace and goodwill, Europe witnessed several gradual developments that would ultimately help propel the continent into war.

The Rise of Nationalism

One such development was the growth of nationalism, or a deep devotion to one's nation. Nationalism can serve as a unifying force within a country. However, it also can cause intense competition among nations, with each seeking to overpower the other. By the turn of the 20th century, a fierce rivalry indeed had developed among Europe's Great Powers. Those nations were Germany, Austria-Hungary, Great Britain, Russia, Italy, and France. This increasing rivalry among European nations stemmed from several sources. Competition for materials and markets was one. Territorial disputes were another. France, for example, had never gotten over the loss of Alsace - Lorraine to Germany in the Franco-Prussian War (1870). Austria-Hungary and Russia both tried to dominate in the Balkans, a region in southeast Europe. Within the Balkans, the intense nationalism of Serbs, Bulgarians, Romanians, and other ethnic groups led to demands for independence.

Imperialism and Militarism

Another force that helped set the stage for war in Europe was imperialism. As Chapter 11 explained, the nations of Europe competed fiercely for colonies in Africa and Asia. The quest for colonies sometimes pushed European nations to the brink of war. As European countries continued to compete for overseas empires, their sense of rivalry and mistrust of one another deepened.

Yet another troubling development throughout the early years of the 20th century was the rise of a dangerous European arms race. The nations of Europe believed that to be truly great, they needed to have a powerful military. By 1914, all the Great Powers except Britain had large standing armies. In addition, military experts stressed the importance of being able to quickly mobilize or organize and move troops in case of a war. Generals in each country developed highly detailed plans for such a mobilization. The policy of glorifying military power and keeping an army prepared for war was known as militarism. Having a

large and strong standing army made citizens feel patriotic. However, it also frightened some people.

As early as 1895, Frédéric Passy, a prominent peace activist, expressed a concern that many shared: "The entire able-bodied population are preparing to massacre one another; though no one, it is true, wants to attack, and everybody protests his love of peace and determination to maintain it, yet the whole world feels that it only requires some unforeseen incident, some unpreventable accident, for the spark to fall in a flash . . . and blow all Europe sky-high."

Tangled Alliances

Growing rivalries and mutual mistrust had led to the creation of several military alliances among the Great Powers as early as the 1870s. This alliance system had been designed to keep peace in Europe. But it would instead help push the continent into war.

Bismarck Forges Early Pacts

Between 1864 and 1871, Prussia's blood-and-iron chancellor, Otto von Bismarck, freely used war to unify Germany. After 1871, however, Bismarck declared Germany to be a "satisfied power." He then turned his energies to maintaining peace in Europe. Bismarck saw France as the greatest threat to peace. He believed that France still wanted revenge for its defeat in the Franco-Prussian War. Bismarck's first goal, therefore, was to isolate France. "As long as it is without allies," Bismarck stressed, "France poses no danger to us." In 1879, Bismarck formed the Dual Alliance between Germany and Austria - Hungary. Three years later, Italy joined the two countries, forming the Triple Alliance. In 1881, Bismarck took yet another possible ally away from France by making a treaty with Russia.

Shifting Alliances Threaten Peace

In 1890, Germany's foreign policy changed dramatically. That year, Kaiser Wilhelm II—who two years earlier had become ruler of Germany—forced Bismarck to resign. A proud and stubborn man, Wilhelm II did not wish to share power with anyone. Besides wanting to assert his own power, the new Kaiser was eager to show the world just how mighty Germany had become. The army was his greatest pride. "I and the army were born for one another," Wilhelm declared shortly after taking power.

Wilhelm let his nation's treaty with Russia lapse in 1890. Russia responded by forming a defensive military alliance with France in 1892 and 1894. Such an alliance had been Bismarck's fear. War with either Russia or France would make Germany the enemy of both. Germany would then be forced to fight a two-front war, or a war on both its eastern and western borders. Next, Wilhelm began a tremendous shipbuilding program in an effort to make the German navy equal to that of the mighty British fleet. Alarmed, Great Britain formed an entente, or alliance, with France. In 1907, Britain made another entente, this time with both France and Russia. The Triple Entente, as it was called, did not bind Britain to fight with France and Russia. However, it did almost certainly ensure that Britain would not fight against them. By 1907, two rival camps existed in Europe. On one side was the Triple Alliance—Germany, Austria-Hungary, and Italy. On the other side was the Triple Entente—Great Britain, France, and Russia. A dispute between two rival powers could

draw all the nations of Europe into war.

Crisis in the Balkans

Nowhere was that dispute more likely to occur than on the Balkan Peninsula. This mountainous peninsula in the southeastern corner of Europe was home to an assortment of ethnic groups. With a long history of nationalist uprisings and ethnic clashes, the Balkans was known as the "powder keg" of Europe.

A Restless Region

By the early 1900s, the Ottoman Empire, which included the Balkan region, was in rapid decline. While some Balkan groups struggled to free themselves from the Ottoman Turks, others already had succeeded in breaking away from their Turkish rulers. These peoples had formed new nations, including Bulgaria, Greece, Montenegro, Romania, and Serbia. Nationalism was a powerful force in these countries. Each group longed to extend its borders. Serbia, for example, had a large Slavic population. It hoped to absorb all the Slavs on the Balkan Peninsula. Russia, itself a mostly Slavic nation, supported Serbian nationalism. However, Serbia's powerful northern neighbor, Austria-Hungary, opposed such an effort. Austria feared that efforts to create a Slavic state would stir rebellion among its Slavic population. In 1908, Austria annexed, or took over, Bosnia and Herzegovina. These were two Balkan areas with large Slavic populations. Serbian leaders, who had sought to rule these provinces, were outraged. In the years that followed, tensions between Serbia and Austria steadily rose. The Serbs continually vowed to take Bosnia and Herzegovina away from Austria. In response, Austria-Hungary vowed to crush any Serbian effort to undermine its authority in the Balkans.

A Shot Rings Throughout Europe

Into this poisoned atmosphere of mutual dislike and mistrust stepped the heir to the Austro-Hungarian throne, Archduke Franz Ferdinand, and his wife, Sophie. On June 28, 1914, the couple paid a state visit to Sarajevo, the capital of Bosnia. It would be their last. The royal pair was shot at point-blank range as they rode through the streets of Sarajevo in an open car. The killer was Gavrilo Princip, a 19-year-old Serbian and member of the Black Hand. The Black Hand was a secret society committed to ridding Bosnia of Austrian rule. Because the assassin was a Serbian, Austria decided to use the murders as an excuse to punish Serbia. On July 23, Austria presented Serbia with an ultimatum containing numerous demands. Serbia knew that refusing the ultimatum would lead to war against the more powerful Austria. Therefore, Serbian leaders agreed to most of Austria's demands. They offered to have several others settled by an international conference. Austria, however, was in no mood to negotiate. The nation's leaders, it seemed, had already settled on war. On July 28, Austria rejected Serbia's offer and declared war. That same day, Russia, an ally of Serbia with its largely Slavic population, took action. Russian leaders ordered the mobilization of troops toward the Austrian border. Leaders all over Europe suddenly took notice. The fragile European stability seemed ready to collapse into armed conflict. The British foreign minister, the Italian government, and even Kaiser Wilhelm himself urged Austria and Russia to negotiate. But it was too late. The machinery of war had been set in motion.

Appendix W

"Marching Toward War"

Reading Comprehension Assessment

1. Nationalism would best be defined as: _____.
    A. A deep devotion to one's nation.
    B. A desire to see military strength in one's nation.
    C. A desire to see nations join for the purpose of making treaties.
    D. A preference to isolate one's nation from others.

2. Which of the following did NOT contribute to the rivalry among European countries?
    A. Disagreements regarding what territories belong to countries.
    B. Competition for materials and markets throughout the world.
    C. Ethnic groups within the Balkans sought their independence.
    D. The creation of medicine thought to cure influenza.

3. Which statement best describes militarism?
    A. A policy that states war should be avoided at all costs.
    B. Military power is glorified in a country with troops ready for war
    C. Every citizen is responsible for their own protection through the bearing of arms.
    D. Weapons are not permitted for any reason.

4. The purpose of the Triple Alliance was to:_____.
    A. Bring European countries together to defend themselves against the United States
    B. Ensure that France would be isolated from other European countries
    C. Be prepared to attack Russia if necessary
    D. Open new trade agreements with the British

5. Wilhelm II potentially placed Germany in great jeopardy when he:
    A. Let the agreement between Germany and Russia lapse in 1890
    B. Disbanded the German military
    C. Created a new treaty with countries in Central America
    D. Attempted to maintain presence in China for trade purposes

6. What event was the impetus for the creation of the Triple Entente?
    A. France created a navy as powerful as England's navy
    B. England created an army as powerful as Germany's army
    C. Germany created a navy as strong as England's navy
    D. Russia created an army and navy stronger than other countries in Europe.

7. Balkan groups in eastern Europe were beginning to break away from:
    A. Turkey
    B. Russia
    C. Morocco
    D. Greece

8. What did Austria-Hungary do that angered Serbian leaders?
    A. Annexed Morocco and Montenegro
    B. Occupied Romania and Serbia
    C. Went to war with Russia
    D. Annexed Bosnia and Herzegovina

9. What event was the "shot heard around the world?"
    A. The assassination of Austro-Hungarian Archduke Franz Ferdinand and his wife
    B. The naval bombardment of Germany by the English
    C. The attempted assassination of the leader of the Black Hand
    D. The bombing of the France by the Russian navy.

10. What lead to the Russians sending troops to the Austrian border?
    A. Serbia wanted war with Austria-Hungary for annexing Bosnia and Herzegovina
    B. Austria-Hungary was preparing to go to war with Serbia
    C. Russia wanted to annex Serbia so Austria-Hungary did not occupy Serbia
    D. Russia was beginning its attempt to take over central Europe

Appendix X

Adolescent Motivation to Read Profile – Quantitative Portion

1. My friends think I am a(n)_____.
   A. Very Good Reader
   B. Good Reader
   C. Ok Reader
   D. Poor Rader

2. Reading is something I like to do.
   A. Never
   B. Not Very Often
   C. Sometimes
   D. Often

3. I read _____.
   A. Not as well as my friends
   B. About the same as my friends
   C. A little better than my friends
   D. A lot better than my friends

4. My best friends reading is: _____.
   A. Really Fun
   B. Fun
   C. Okay
   D. Not fun at all

5. When I come to a word I do not know, I can: _____.
   A. Almost always figure it out
   B. Sometimes figure it out
   C. Almost never figure it out
   D. Never figure it out

6. I tell my friends about different stories I read.
   A. I never do this
   B. I almost never do this
   C. I do this some of the time
   D. I do this a lot

7. When I am reading by myself, I understand: _____.
   A. Almost everything I read
   B. Some of what I read
   C. Almost none of what I read
   D. None of what I read

8. People who read are: _____.
   A. Very Interesting
   B. Interesting
   C. Not Very Interesting
   D. Boring

9. I am a(n): _____.
   A. Poor Reader
   B. Okay Reader
   C. Good Reader
   D. Very Good Reader

10. I think spending time reading is a(n): _____.
    A. Great way to spend time
    B. Interesting way to spend time
    C. Okay way to spend time
    D. A boring way to spend time

11. I worry about what other kids think about my reading ability.
    A. Every Day
    B. Almost Every Day
    C. Occasionally
    D. Never

12. For me, knowing to read well is: _____.
    A. Not Very Important
    B. Sort of Important
    C. Important
    D. Very Important

13. When my teacher asks me a question about what I have read, I: _____.
    A. Can never think of an answer
    B. Have trouble thinking of an answer
    C. Sometimes think of an answer
    D. Always think of an answer

14. If I had a strategy to use when reading about world history to help me understand, I would read more.
    A. Likely
    B. Most Likely
    C. Less Likely
    D. Not Likely

15. In general, reading material for my classes is: _____.
    A. Very Easy for Me
    B. Kind of Easy for Me
    C. Kind of Hard for Me
    D. Very Hard for Me

16. As an adult, I will spend: _____.
    A. None of My Time Reading
    B. Very Little Time Reading
    C. Some of My Time Reading
    D. A Lot of My Time Reading

17. When I am in a group talking about what we are reading in history class, I: __.
    A. Almost Never Talk About My Ideas
    B. Sometimes Talk About My Ideas
    C. Almost Always Talk About My Ideas
    D. Always Talk About My Ideas

18. I would like for my teachers to read out loud in my classes: _____.
    A. Every Day
    B. Almost Every Day
    C. Once in A While
    D. Never

19. When I read out loud in class, I am a: _____.
    A. Poor Reader
    B. Okay Reader
    C. Good Reader
    D. Very Good Reader

20. If someone gave me a book about world history for a present, I feel: _____.
    A. Very Happy
    B. Sort of Happy
    C. Sort of Unhappy
    D. Unhappy

Appendix Y

Adolescent Motivation to Read Profile – (Qualitative Portion)

A. Emphasis: Narrative text

Say: I have been reading a good book. I was talking with (fill in) last night about it. I enjoy talking about what I am reading with my friends and family. Today, I would like to hear about what you have been reading and if you share it.

1. Tell me about the most interesting story or book you have read recently. Take a few minutes to think about it. When you are ready, tell me about it.

1a. What else can you tell me? Is there anything else?

2. How did you know of find out about this book? (Assigned? Chosen? In school? Out of school)

3. Why was this story interesting to you?

B. Emphasis: Informational text

Say: Often we read to find out or learn about something that interests us. For example, a student I recently worked with enjoyed reading about his favorite sports team in the Internet. I am going to ask you some questions about what you like to read to learn about.

1. Think about something important that you have learned recently about world history, not from your teacher and not from television or any social media, but from something you have read. What did you read about? Tell me about what you learned?

1a. What else could you tell me? Is there anything else?

2. How did you know or find out about reading material on this? (Assigned, Chosen, In/Out of school)

3. Why was reading this important to you?

C. Emphasis: General reading

1. Did you read anything at home yesterday? What?

2. Do you have anything here or at home today that you are reading?

2a. Tell me about what you are reading here or at home?

3. Tell me about your favorite author.

4. What do you think you have to learn to be a better reader?

5. Do you have any books right now that you would like to read? Tell me about them.

6. How did you find out about these books?

7. What are some things that get you excited about reading? Tell me about them.

D. Emphasis: Cognitive Processes Before/After Reciprocal Teaching Intervention

Say: Thank you for taking time to discuss with me your experiences with reading in your social studies classroom. The purpose of this interview is to help me gain a better understanding of any steps or strategies you use to read and understand social studies text. Your answers will be of assistance to me as I complete my study regarding reading comprehension levels of 9th grade social studies students. There will be two sessions of questioning. Session One is take as we speak. Session Two will be at the end of the study. Do you have any questions? As a reminder, you are free to discontinue this discussion at any time.

1. In the past few days, you were asked to read the passage "Marching to War." Did you use any methods or strategies to understand the reading?

<u>If "Yes"</u>

1a. Could you explain to me what methods and strategies you used (there may be follow-

up questioning to help understand the student's method or strategy)?

1b. Where did you learn this method or strategy?

1c. Do you feel this method or strategy helps you understand the text?

1d. Are you open to learning about another strategy that may help you understand text?

If "No"

1e. Were you ever taught methods or strategies to help you understand text?

If "No"

1f. Are you open to learning about a strategy that may help you understand text?

If "Yes"

1g. Where did you learn this method or strategy?

1h. Why do you not use it?

1i. Are you open to learning about another strategy that may help you understand text?

Say: Thank you very much for you time. Your responses are informative for me. I will be back in touch with you at the end of the study to complete Session Two.

Session Two

Say: Hi (insert name), if you recall, we talked a month ago about any reading methods or strategies you used to aid in your understanding of social studies text. During that conversation, you indicated (summarize their responses to questions from session one). I then told you there would be a second session of additional questions. Are you willing to answer a few more questions for me? Again, the purpose of this interview is to help me gain a better understanding of any steps or strategies you use to read and understand social studies text. Your answers will be of assistance to me as I complete my study regarding reading comprehension levels of 9th grade social studies students.

Do you have any questions? As a reminder, you are free to discontinue this discussion at any time.

1- Could you explain for me how you approach reading social studies text now compared to before participating in the study?

If "No Change"

1a. If there is no change to your approach, could you explain why that is right now (follow-up will depend on answer)?

1b. Could you explain to me what the Reciprocal Teaching strategy is and the four steps that comprise the strategy?

1c. Is there something that could have been done differently that would have influenced you to use the Reciprocal Teaching strategy?

If "Change"

1d. If there is a change to your approach, could you explain what that is right now (follow-up will depend on answer)?

1e. Could you explain to me what the Reciprocal Teaching strategy is and the four steps that comprise the strategy?

1f. Do you use some of the steps or all the steps of Reciprocal Teaching in your approach to reading text in social studies? Why is that? Do you use them in a particular order?

1g. Do you think that you will continue to use Reciprocal Teaching strategies in part, or in whole, moving forward with other social studies readings? Why? Why not?

Say: Thank you, again for your time. Your insights have been very helpful in this process.

Appendix Z

Teacher Informed Consent Form - Implementation

Johns Hopkins University

Homewood Institutional Review Board (HIRB)

Teacher Participant Code: _____

Teacher Informed Consent Form – Implementation

Title:	Reciprocal Teaching in the World History Classroom
Principal Investigator:	Dr. Stephen Pape, Johns Hopkins University, School of Education
Date:	March 25, 2019

PURPOSE OF RESEARCH STUDY:

This is a student research project that is part of a Doctor of Education dissertation at Johns Hopkins University, School of Education. This study is being conducted by researcher, Casey Handfield, who is a doctoral student at Johns Hopkins University and principal of Auburn High School, and Dr. Stephen Pape, his advisor and principal investigator. The purpose of this research study is to examine whether a reading strategy known as Reciprocal Teaching impacts grade 9 college preparatory students' reading comprehension and motivational levels to engage in content area reading in social studies. It is anticipated that 7 teachers will participate in this study.

PROCEDURES:

The procedures for the study include two parts: an implementation period and data collection period. It is understood that by signing this form you are agreeing to participate in the **implementation of the Reciprocal Teaching Intervention and related data collection procedures**.

The implementation of the Reciprocal Teaching intervention will last approximately 20 school days and has been organized into 4 weeks. During the four weeks of the study, participants will introduce the Reciprocal Teaching intervention, review the Reciprocal Teaching steps with students, facilitate the use of each of the Reciprocal Teaching steps among students, and have students use the Reciprocal Teaching Steps independently.

Participants will have access to the literacy coach at the end of each day during the 4-week intervention period to review how the daily lesson went and to provide suggestions and support. The conversations between the participants and the literacy coach are confidential. The researcher, Casey Handfield, and the trained observer from the Department of English will also be present during Weeks One – Four to observe students' acquisition and proper use of each strategy that comprises the Reciprocal Teaching intervention.

Teachers will complete surveys and rating scales before the intervention period and after the intervention period regarding implementation of literacy practices with students. Teachers will also participate in semi-structured interviews with the researcher, Casey Handfield, regarding these constructs.

RISKS/DISCOMFORTS:

The risks associated with participation in this study are no greater than those encountered in daily life or during the performance of routine physical or psychological examinations.

BENEFITS:

The benefits from participation include professional development regarding adolescent literacy knowledge of implementation of the Reciprocal Teaching literacy strategy with students.

VOLUNTARY PARTICIPATION AND RIGHT TO WITHDRAW:

Your participation in this study is entirely voluntary: You choose whether to participate. If you decide not to participate, there are no penalties, and you will not lose any benefits to which you would otherwise be entitled.

If you choose to participate in the study, you can stop your participation at any time, without any penalty or loss of benefits. If you want to withdraw from the study, please be in touch with student investigator, Casey Handfield, via email at chandfield@auburn.k12.ma.us. All that is needed is a written statement that you do not wish to proceed in this study.

CIRCUMSTANCES THAT COULD LEAD US TO END YOUR PARTICIPATION:

Under certain circumstances we may decide to end your participation before you have completed the study. Specifically, we may stop your participation if you are not participating in the professional development at a level deemed satisfactory or you are not implementing the Reciprocal Teaching intervention with fidelity. There may also be other circumstances that would lead us to end your participation.

CONFIDENTIALITY:

Any study records that identify you will be kept confidential to the extent possible by law. The records from your participation may be reviewed by people responsible for making sure that research is done properly, including members of the Johns Hopkins University Homewood Institutional Review Board and officials from government agencies such as the National Institutes of Health and the Office for Human Research Protections. (All of these people are required to keep your identity confidential.) Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records. All records of study participants will have a corresponding participant identification number or pseudonym. This information will be held in confidence and securely stored in a computer database and/or locked file cabinet.

COSTS

There are no costs associated with participating in this study.

COMPENSATION:

You will not receive any payment or other compensation for participating in this study.

IF YOU HAVE QUESTIONS OR CONCERNS:

You and your child can ask questions about this research study now or at any time during the study, by contacting the student investigator, Casey Handfield, via phone at (508) 832-7711 or email at chandfield@auburn.k12.ma.us. You may also contact the primary investigator, Stephen Pape, via phone at (410) 516-7953 or email at Stephen.Pape@jhu.edu.

If you have questions about your rights as a research participant or feel that you have not been treated fairly, please call the Homewood Institutional Review Board at Johns Hopkins University at (410) 516-6580.

SIGNATURES

WHAT YOUR SIGNATURE MEANS:

Your signature below means that you understand the information in this consent form. Your signature also means that you agree to participate in the study. By signing this consent form, you have not waived any legal rights you otherwise would have as a participant in a research study.

_____

Participant's Signature **Date**

_____

Signature of Person Obtaining Consent (Investigator or HIRB Approved Designee) **Date**

Appendix AA

Student Recruitment Script

Dear Students,

For those of you who do not know me, I am Mrs. Bazinet, English Department Chairperson. I am assisting in a research project that is examining the impact of a reading strategy called Reciprocal Teaching on 9th grade students' reading motivation and comprehension levels in the social studies classroom.

I am inviting each of you to participate in this study during the Third Trimester of this school year. All students enrolled in freshman social studies classes during the Third Trimester are invited to participate. All students will participate in this instruction for 20 days. During this time, you will learn the Reciprocal Teaching reading strategy, work in groups to practice the Reciprocal Teaching reading strategy, and independently use the Reciprocal Teaching strategy. If you agree to participate and your parents provide permission for you to participate, you will be asked to complete reading comprehension quizzes and surveys about your motivation to read. Some of you will be randomly asked to participate in focus groups with me regarding your experiences during the study.

Your participation may help to improve your reading comprehension ability in social studies and other content areas, while also contributing to research that may improve educational approaches to adolescent reading instruction across the country and world. Your participation in the study will occur during your social studies class. All data gathered will be completely confidential. Your participation is completely voluntary. If you participate, and your parent(s) agree to your participation, you can withdraw from the study at any time without penalty. You are welcome to ask any questions you may have at any time. You can reach me via email at cbazinet@auburn.k12.ma.us or by stopping by my office.

Thank you for your time and consideration. Please review the attached consent/assent form with your parent(s) tonight and return it with the appropriate signatures tomorrow. You may also return the signed consent/assent form to the main office.

Sincerely,

Cynthia Bazinet

Appendix BB

Automated Phone Call Script and Email Script to Parents

Phone

Good Evening Everyone,

This is Auburn High School English Department Chair, Cynthia Bazinet. I am calling you tonight to request that you check your email this evening. In your email you will find a letter and Consent/Assent form from me explaining a study that your child has been invited to participate in during their social studies class. After reviewing the contents of my email and attachments, please discuss your child's participation with your son or daughter. I visited with them in their social studies classes prior to my contact with you tonight to explain the study. If you have any questions, please feel free to contact me via the email address that is attached to the email I sent you this evening. You may also call me at the school if you have questions.

Thank you, all, very much. Good night.

Email

Good Evening,

As stated in my phone call, please read the two documents attached to this email. The first document is a letter from me explaining a study being conducting in freshman social studies classes regarding the impact of a reading strategy called Reciprocal Teaching on students reading comprehension and motivational levels. The second document is a permission/assent form (permission slip) that allows for your child to participate in the study. Because your child is under 18 years of age, you BOTH are required to sign the form to demonstrate permission for your child's participation and your child's assent to participate in the study. Please speak with your child tonight regarding their participation. If you consent to participate, please return the signed consent form to your child's social studies teacher tomorrow or to the main office.

Sincerely,

Cynthia Bazinet

Appendix CC

Parental Permission/Student Assent Form

Johns Hopkins University
Homewood Institutional Review Board (HIRB)

Student Participant Code:

Parental Permission/Student Assent Form

Title:	Reciprocal Teaching in the Social Studies Classroom
Principal Investigator:	Dr. Stephen Pape, Johns Hopkins University, School of Education
Date:	March 15, 2019

PURPOSE OF RESEARCH STUDY:

This is a student research project that is part of a Doctor of Education dissertation at Johns Hopkins University, School of Education. This study is being conducted by researcher, Casey Handfield, who is a doctoral student at Johns Hopkins University and principal of Auburn High School, and Dr. Stephen Pape his advisor and principal investigator. The purpose of this research study is to examine whether a reading strategy known as Reciprocal Teaching impacts grade 9 college preparatory students' motivational levels to engage in reading social studies text, as well as their reading comprehension levels of social studies specific text. Reciprocal Teaching has been shown to be an effective reading strategy within elementary and middle school classrooms. This research study will take place in your child's social studies class. The study work will not interfere with students' abilities or time to learn required educational content in their classes. Course content normally presented to students in various teacher-directed activities will be presented to them in the Reciprocal Teaching format. It is anticipated that approximately 105 children will participate in this study.

PROCEDURES:

This research study will last approximately 20 school days and has been organized into 4 weeks. All ninth-grade students will have the opportunity to learn the Reciprocal Teaching reading strategy as normal classroom practice. Your child will be asked to use this strategy in a group and individual format during this instruction.

If you and your child agree to participation in the research study, your child will complete pretests and surveys to measure their motivation to read and reading comprehension level on a social studies text during the first week of the intervention. Your child's teacher will introduce, model, and practice the Reciprocal Teaching reading strategy in your child's classroom during their scheduled social studies class. Your child may also be asked to

participate in focus groups regarding their motivation to read and experience with the Reciprocal Teaching reading strategy. Five groups of 5 students will be randomly selected from the student participant pool until 5 groups of 5 students have been achieved. If selected to participate in these focus groups, the audiotaped interviews will last between 30-60 minutes and will be conducted by researcher, Casey Handfield, at the end of the 20-day study. All data will be assigned a participant number to protect the identity of participants and be kept in a secured file in the office of the researcher.

During daily instruction, your child's teacher will review the Reciprocal Teaching strategy and its 4 steps (predicting, questioning, clarifying, and summarizing) with the class and ask each child to participate in discussion groups based on class readings. The discussion will be guided by different children employing the different steps that comprise the Reciprocal Teaching reading strategy. During Week 2 the teacher will provide opportunities to use each step and ensure that each child is employing the steps correctly. During Weeks 3 and 4, your child will employ the Reciprocal Teaching intervention independently in student led groups with and without assistance from their teacher.

At the end of Week 4, students will complete posttests and surveys to measure their motivation to read and reading comprehension on tasks like the end-of-trimester assessments students already complete. Each child may also participate in semi-structured interviews and focus groups regarding their motivation to read and reading comprehension ability. Students will be selected at random from the student participant pool until 5 groups of 5 students have been achieved. The audio recorded interviews will last between 30-60 minutes and will be conducted by researcher, Casey Handfield. All data will be assigned a participant number and/or pseudonym to protect the identity of participants. These identifiers will be kept in a secured file in the office of the researcher.

RISKS/DISCOMFORTS:

The risks associated with participation in this study are no greater than those encountered in daily life or attending school and class on a regular day.

BENEFITS:

Direct benefits to your child will include their acquisition of the Reciprocal Teaching reading comprehension strategy. This strategy may be employed across the curriculum as your child engages independently with content area reading assignments. This study will also be an important addition to the empirical research literature that educators seek out to improve their pedagogical practice.

VOLUNTARY PARTICIPATION AND RIGHT TO WITHDRAW:

Your child's participation in this study is entirely voluntary: You choose whether to allow your child to participate, and we will also ask your child whether he or she agrees to take part in the study. If you decide not to allow your child to participate or your child chooses not to participate, there are no penalties, and neither you nor your child will lose any benefits to which you would otherwise be entitled.

If you and your child choose to participate in the study, you or your child can stop participation at any time, without any penalty or loss of benefits. If you want to withdraw your child from the study, or your child wants to stop participating, please contact

researcher, Casey Handfield, at chandfield@auburn.k12.ma.us and state you and/or your child wishes to discontinue participation in the study.

CIRCUMSTANCES THAT COULD LEAD US TO END YOUR PARTICIPATION:

Under certain circumstances we may decide to end your child's participation before he or she has completed the study. Specifically, we may stop your child's participation if he or she appear to be in any distress, are excessively absent from class, or serving as a distraction in the classroom while the research study is being conducted. There may also be other circumstances that would lead us to end your child's participation that are not referenced here. In these instances, the researcher would contact you.

CONFIDENTIALITY:

Any study records that identify you or your child will be kept confidential to the extent possible by law. The records from your child's participation may be reviewed by people responsible for making sure that research is done properly, including members of the Johns Hopkins University Homewood Institutional Review Board and officials from government agencies such as the National Institutes of Health and the Office for Human Research Protections. (All of these people are required to keep your identity and the identify of your child confidential.) Otherwise, records that identify you or your child will be available only to people working on the study, unless you give permission for other people to see the records.

COMPENSATION:

Your child will not receive any payment or other compensation for participating in this study.

IF YOU HAVE QUESTIONS OR CONCERNS:

You and your child can ask questions about this research study now or at any time during the study, by contacting the student investigator, Casey Handfield, via phone at (508) 832-7711 or email at chandfield@auburn.k12.ma.us. You may also contact the primary investigator, Stephen Pape, via phone at (410) 516-7953 or email at Stephen.Pape@jhu.edu. If you or your child have questions about your child's rights as a research participant or feel that your child has not been treated fairly, please call the Homewood Institutional Review Board at Johns Hopkins University at (410) 516-6580.

SIGNATURES

WHAT YOUR SIGNATURE MEANS:

Your signature below means that you understand the information in this consent form. Your signature also means that you agree to allow your child to participate in the study. Your child's signature indicates that he or she agrees to participate in the study.

By signing this consent form, you [and your child] have not waived any legal rights your child otherwise would have as a participant in a research study.

Child's Name

Child's Signature (if applicable) **Date**

Signature of Parent **Date**

Signature of Second Parent (if required) **Date**

Signature of Legal Guardian (if applicable) **Date**

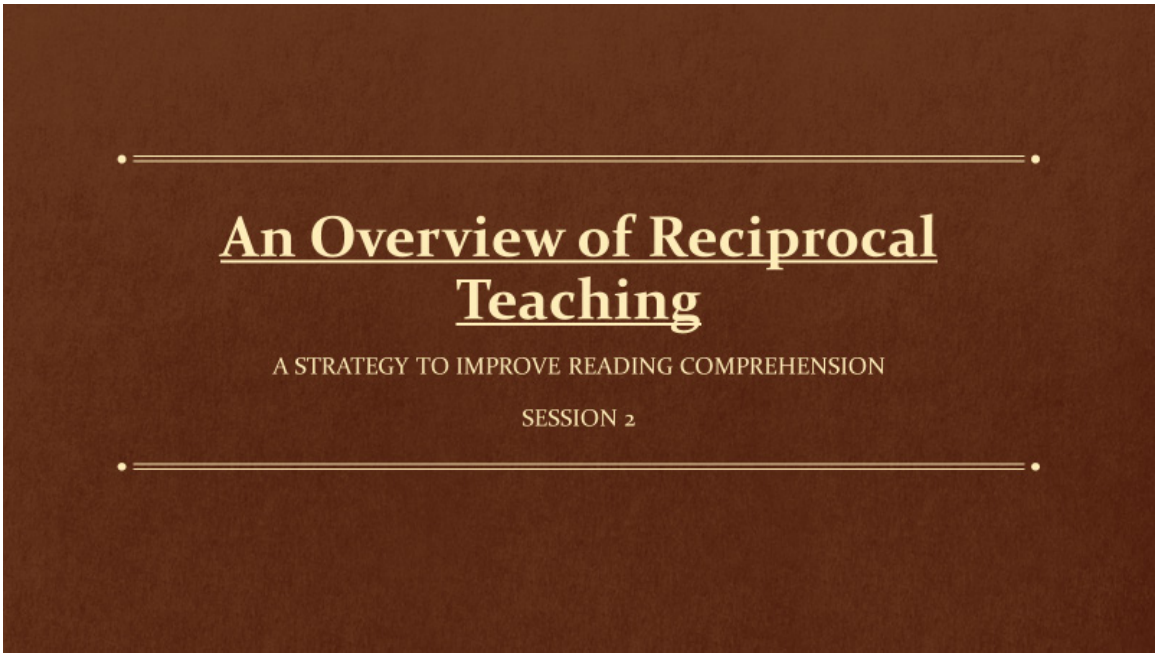
Signature of Person Obtaining Consent **Date**

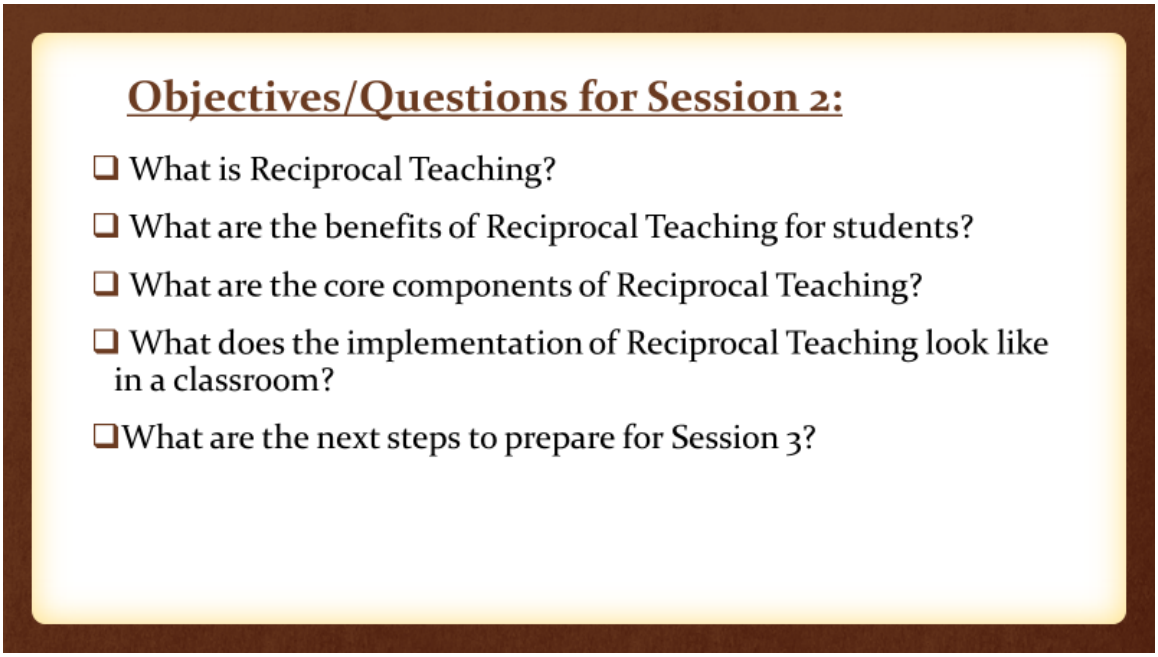
(Investigator or HIRB-Approved Designee) **Date**

Witness to Consent Procedures (if required by HIRB) **Date**

Appendix DD

Session 2 Presentation





Pre-Assessment for Today's Session

1. Reciprocal Teaching is an instructional practice that **CAN** improve:

   (a) vocabulary (b) reading comprehension (c) reading fluency (d) phonemic awareness

2. Which is **NOT** a component of Reciprocal Teaching?

   (a) summarizing (b) questioning (c) condensing (d) clarifying (e) predicting

3. Please indicate if the following statement is **TRUE** or **FALSE**:

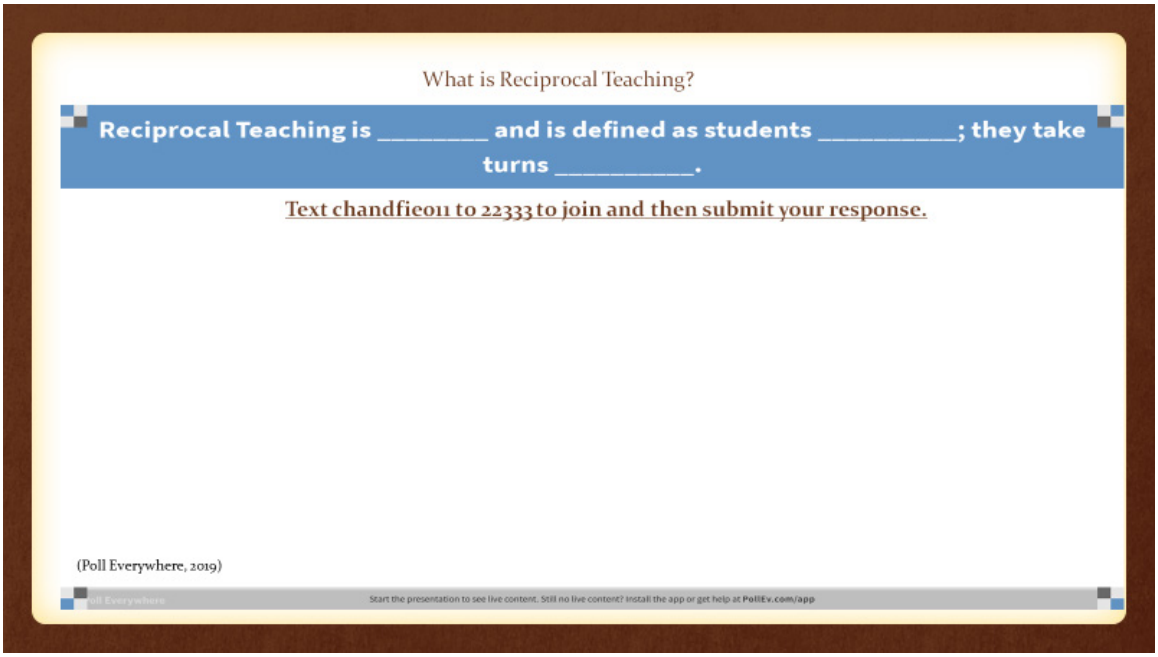
   "Reciprocal Teaching is an instructional practice where the teacher reads passages of text to students as they sit passively at their desks."

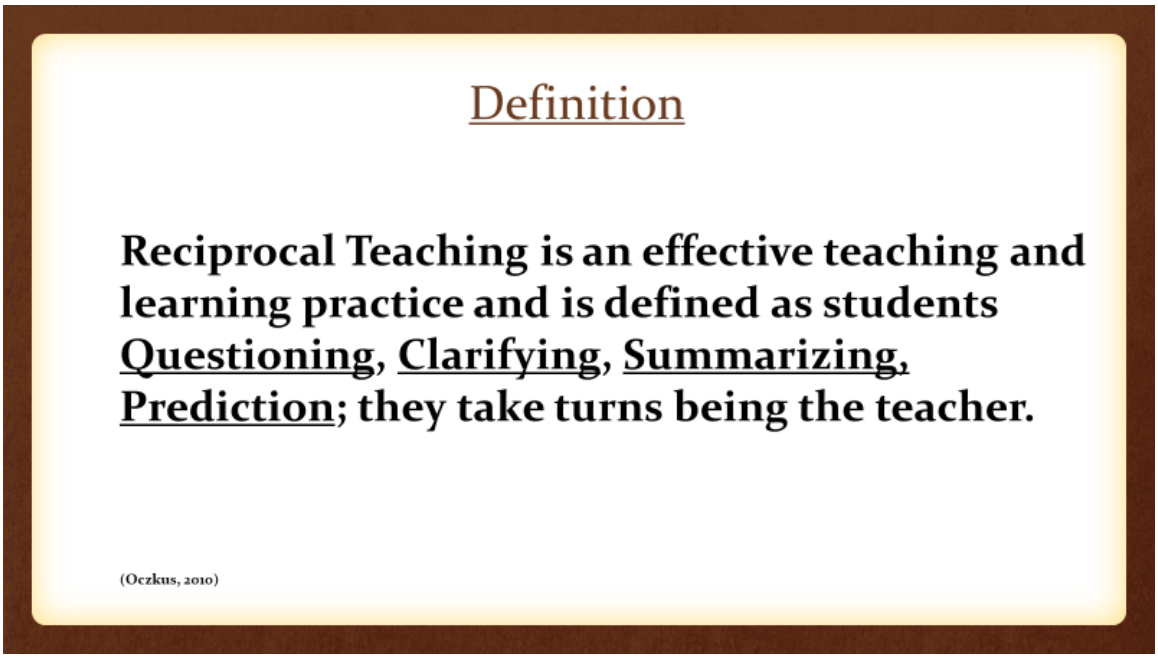
4. Which strategy below is **NOT** one of the four foundations used in Reciprocal Teaching?

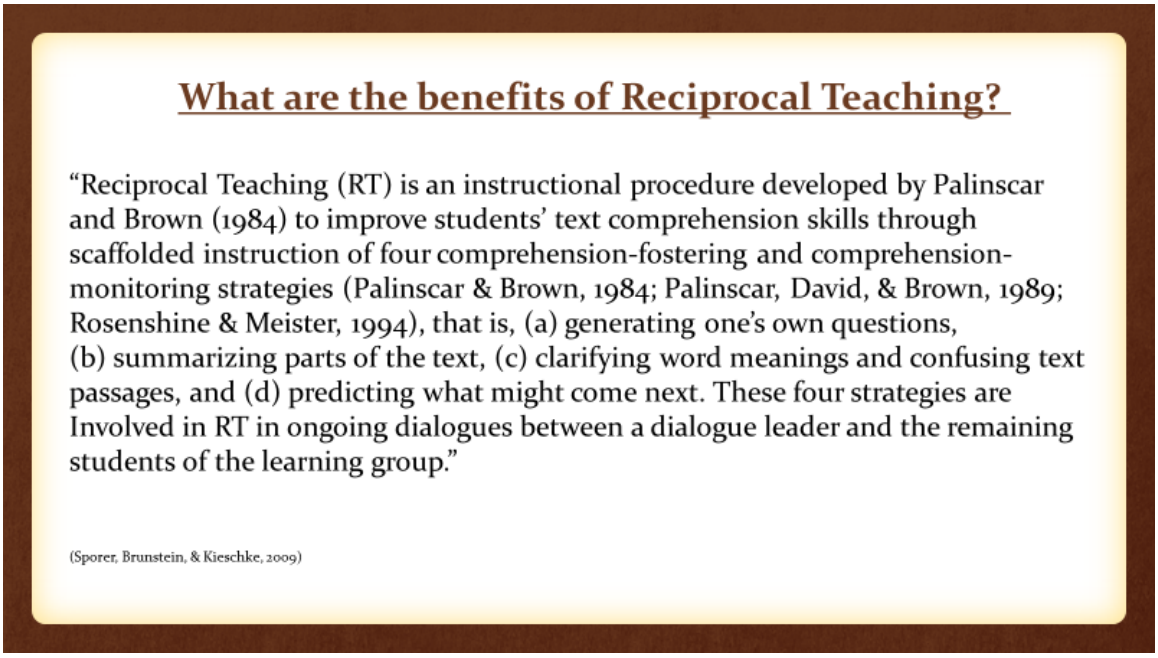
   (a) Think-Alouds (b) Cooperative Learning (c) Scaffolding (d) Jigsawing

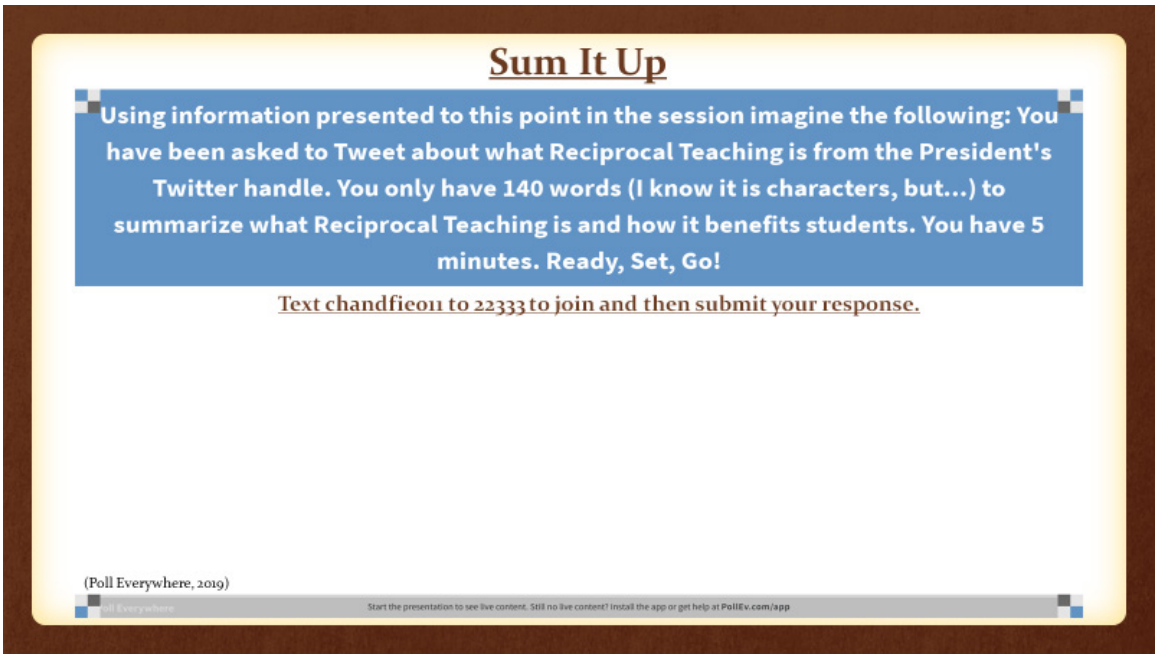
5. Please indicate if the following statement is **TRUE** or **FALSE**:

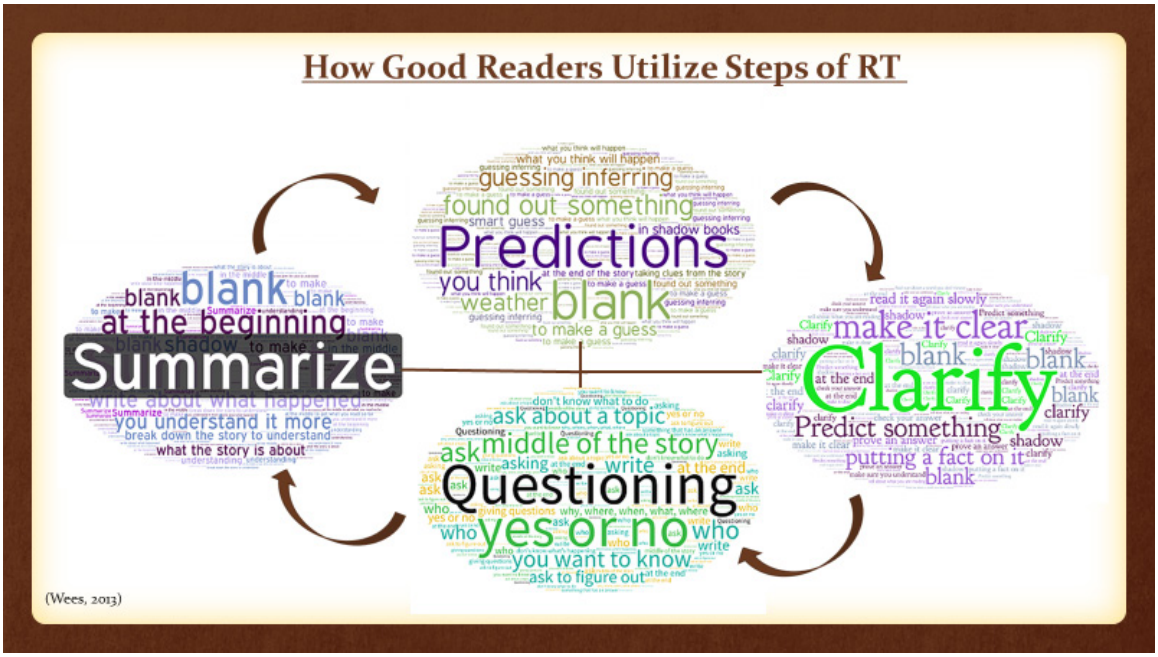
   " The four components of Reciprocal Teaching occur before, during, and after reading the text."




Definition
Reciprocal Teaching is an effective teaching and learning practice and is defined as students Questioning, Clarifying, Summarizing, Prediction; they take turns being the teacher.
(Oczkus, 2010)


What are the benefits of Reciprocal Teaching?
"Reciprocal Teaching (RT) is an instructional procedure developed by Palinscar and Brown (1984) to improve students' text comprehension skills through scaffolded instruction of four comprehension-fostering and comprehension-monitoring strategies (Palinscar & Brown, 1984; Palinscar, David, & Brown, 1989; Rosenshine & Meister, 1994), that is, (a) generating one's own questions, (b) summarizing parts of the text, (c) clarifying word meanings and confusing text passages, and (d) predicting what might come next. These four strategies are Involved in RT in ongoing dialogues between a dialogue leader and the remaining students of the learning group."
(Sporer, Brunstein, & Kieschke, 2009)


Sum It Up
Using information presented to this point in the session imagine the following: You have been asked to Tweet about what Reciprocal Teaching is from the President's Twitter handle. You only have 140 words (I know it is characters, but...) to summarize what Reciprocal Teaching is and how it benefits students. You have 5 minutes. Ready, Set, Go!
Text chandfieo11 to 22333 to join and then submit your response.
(Poll Everywhere, 2019)
Start the presentation to see live content. Still no live content? Install the app or get help at PollEv.com/app


How Good Readers Utilize Steps of RT
Summarize
blank
at the beginning
you understand it more
break down the story to understand
what the story is about
Predictions
what you think will happen
guessing inferring
found out something
smart guess
in shadow books
you think
weather
blank
to make a guess
Questioning
ask about a topic
middle of the story
write
ask
asking
at the end
yes or no
who
you want to know
ask to figure out
Clarify
make it clear
blank
at the end
Predict something
putting a fact on it
shadow
clarify
(Wees, 2013)

Students Take Charge: Reciprocal Teaching in Action (Seattle, WA)

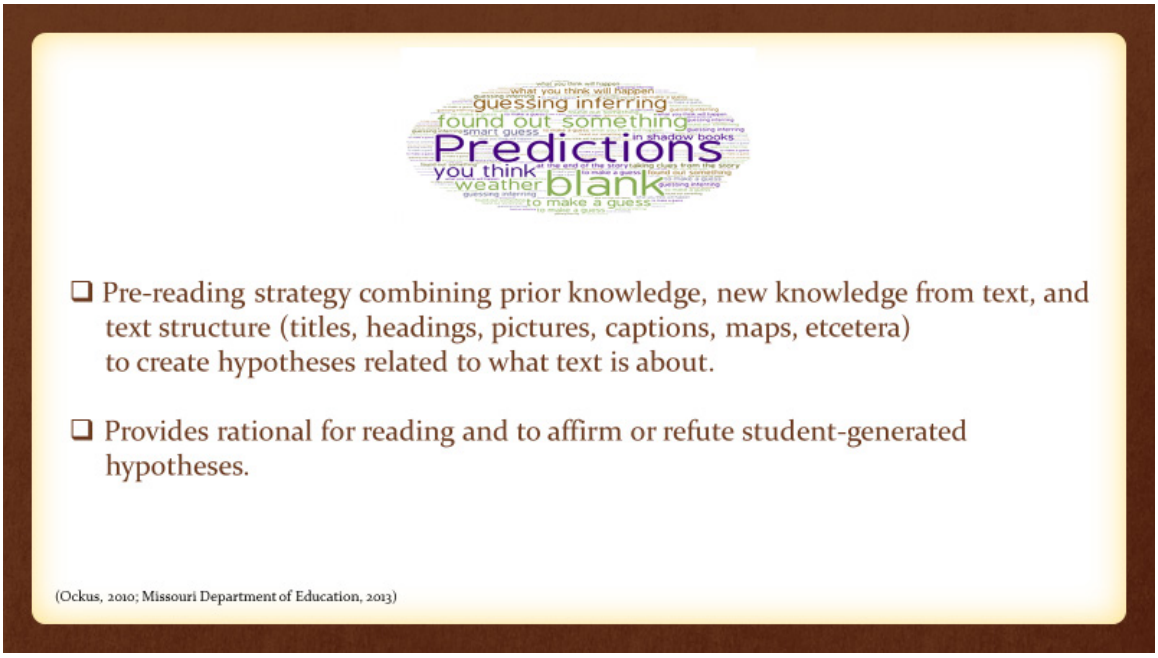
(Reading Rockets, 2014)

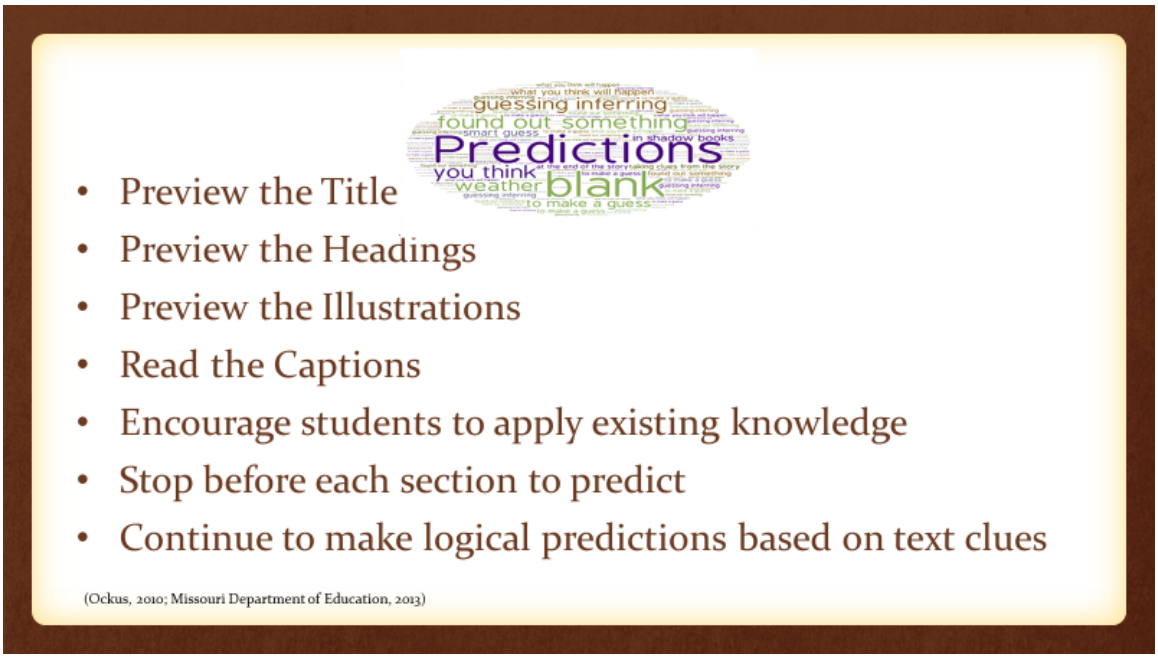
Students Take Charge: Reciprocal Teaching in Action (Seattle, WA)

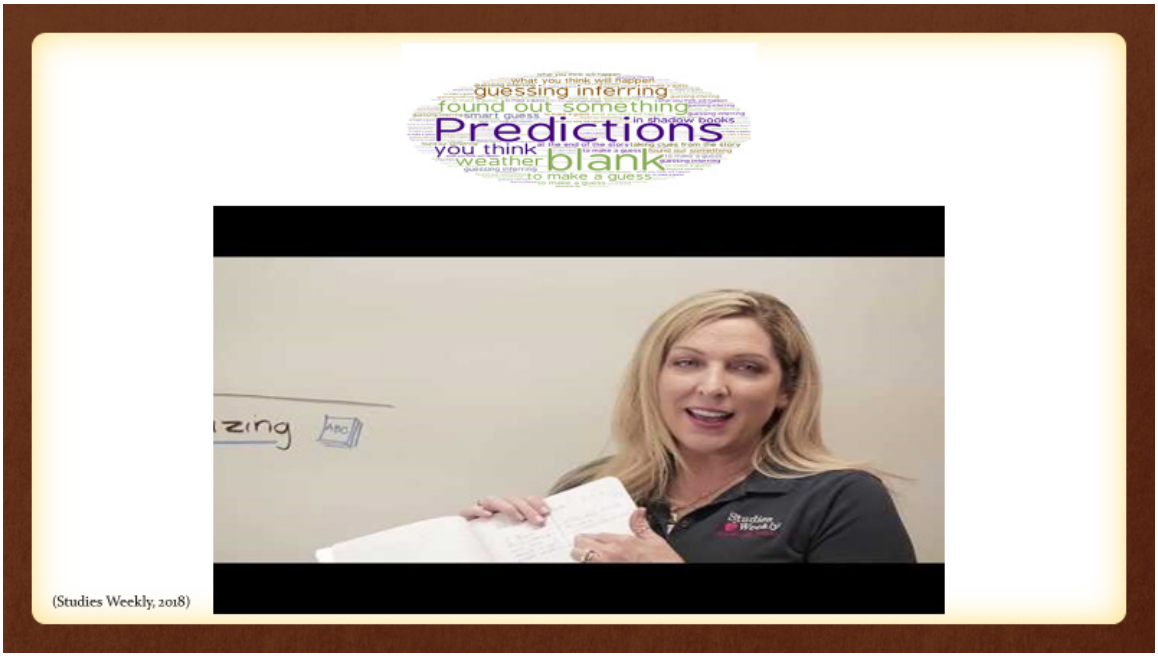
	What I Saw . . .	What I Do . . .	
Predicting			
Clarifying			
Questioning			
Summarizing			

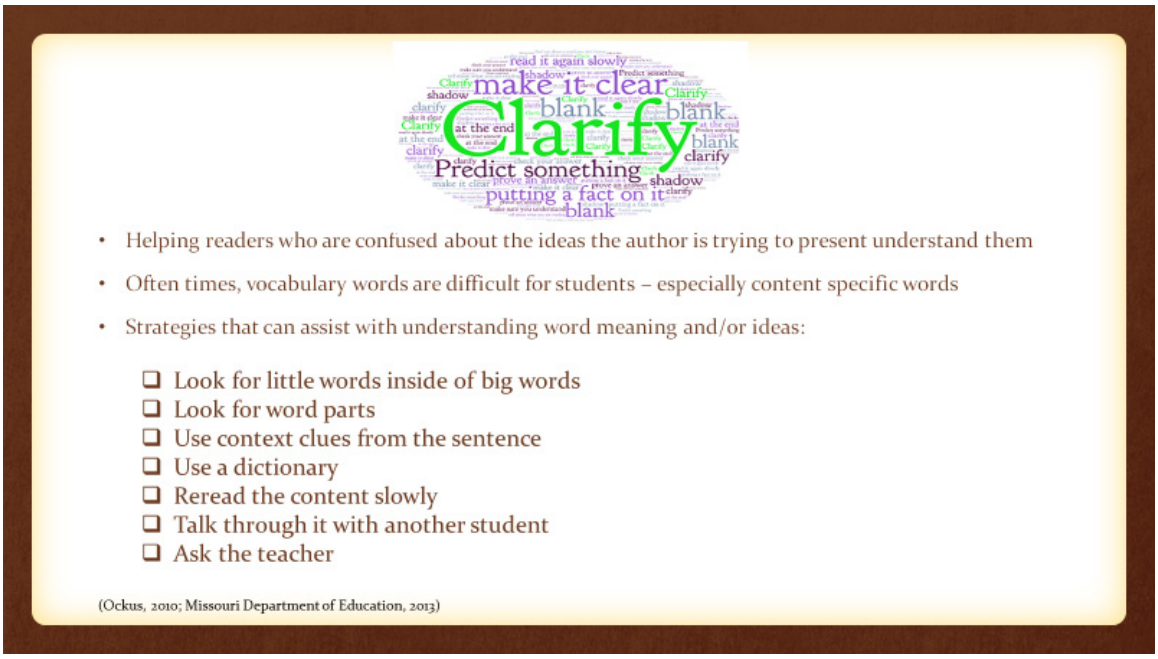
(Missouri Department of Education, 2014)


Let's Look at Each Step of Reciprocal Teaching
Predictions
Clarify
Summarize
Questioning
(Wees, 2013)


Predictions
❑ Pre-reading strategy combining prior knowledge, new knowledge from text, and text structure (titles, headings, pictures, captions, maps, etcetera) to create hypotheses related to what text is about.
❑ Provides rational for reading and to affirm or refute student-generated hypotheses.
(Ockus, 2010; Missouri Department of Education, 2013)


guessing inferring
found out something
Predictions
you think
weather
blank
to make a guess
Preview the Title
Preview the Headings
Preview the Illustrations
Read the Captions
Encourage students to apply existing knowledge
Stop before each section to predict
Continue to make logical predictions based on text clues
(Ockus, 2010; Missouri Department of Education, 2013)

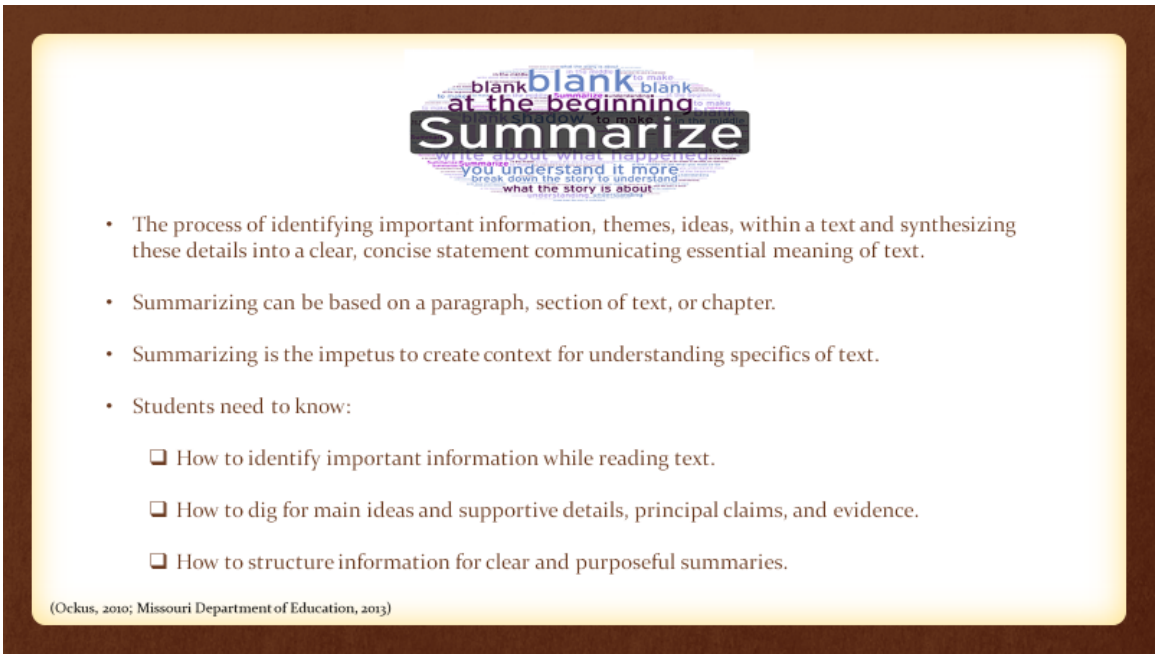

guessing inferring
found out something
Predictions
you think
weather
blank
to make a guess
(Studies Weekly, 2018)



- Helping readers who are confused about the ideas the author is trying to present understand them
- Often times, vocabulary words are difficult for students – especially content specific words
- Strategies that can assist with understanding word meaning and/or ideas:
  - ❑ Look for little words inside of big words
  - ❑ Look for word parts
  - ❑ Use context clues from the sentence
  - ❑ Use a dictionary
  - ❑ Reread the content slowly
  - ❑ Talk through it with another student
  - ❑ Ask the teacher

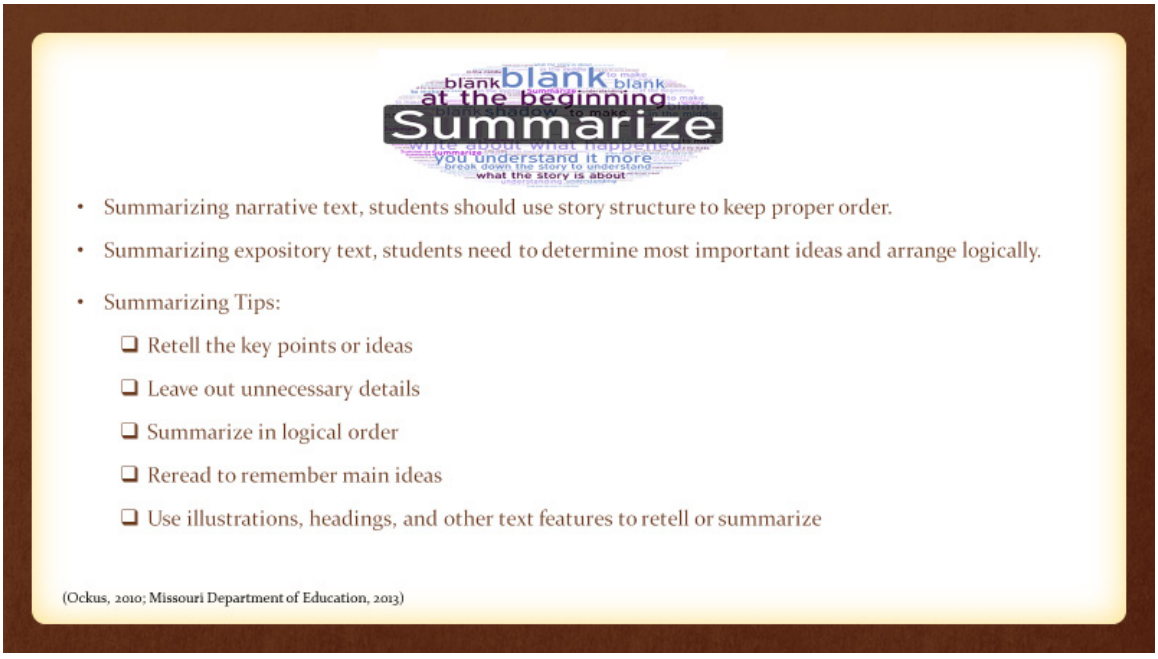
(Ockus, 2010; Missouri Department of Education, 2013)

(Studies Weekly, 2018) (2:46)



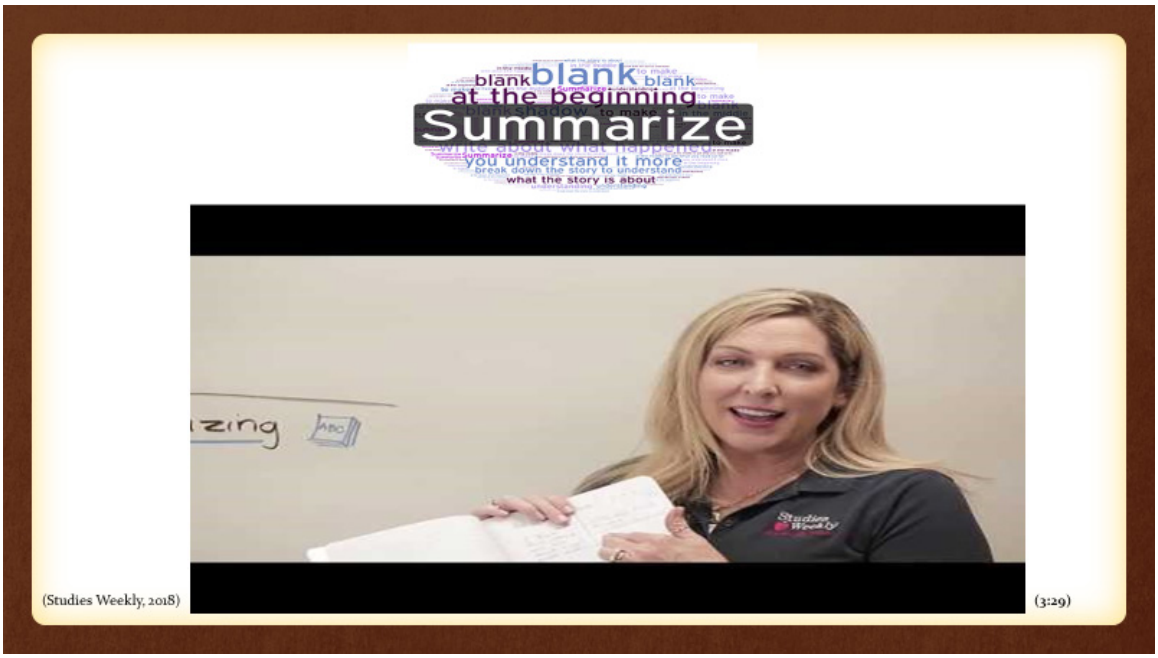
- The process of identifying important information, themes, ideas, within a text and synthesizing these details into a clear, concise statement communicating essential meaning of text.
- Summarizing can be based on a paragraph, section of text, or chapter.
- Summarizing is the impetus to create context for understanding specifics of text.
- Students need to know:
  - ❑ How to identify important information while reading text.
  - ❑ How to dig for main ideas and supportive details, principal claims, and evidence.
  - ❑ How to structure information for clear and purposeful summaries.

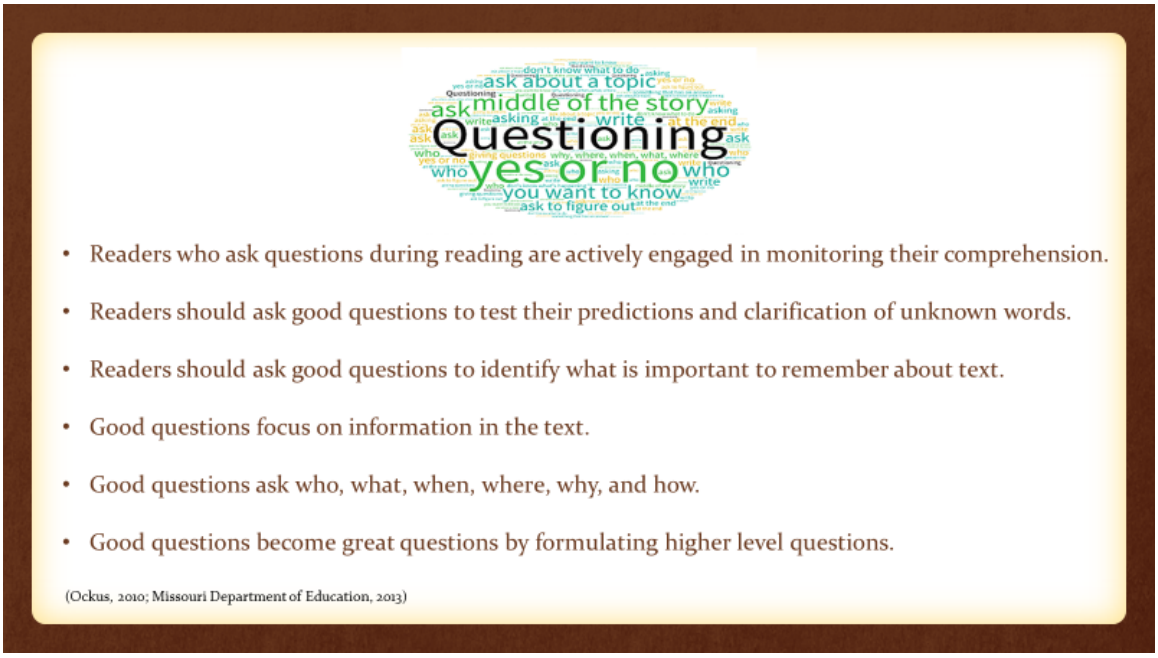
(Ockus, 2010; Missouri Department of Education, 2013)

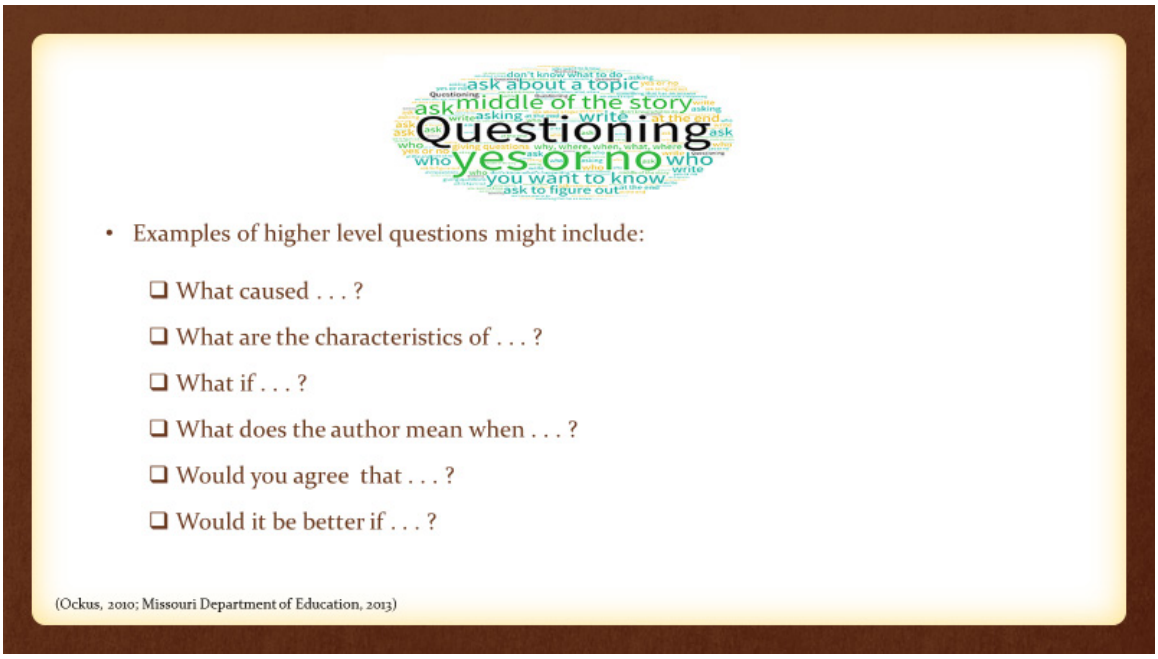


- Summarizing narrative text, students should use story structure to keep proper order.
- Summarizing expository text, students need to determine most important ideas and arrange logically.
- Summarizing Tips:
  - ❑ Retell the key points or ideas
  - ❑ Leave out unnecessary details
  - ❑ Summarize in logical order
  - ❑ Reread to remember main ideas
  - ❑ Use illustrations, headings, and other text features to retell or summarize

(Ockus, 2010; Missouri Department of Education, 2013)

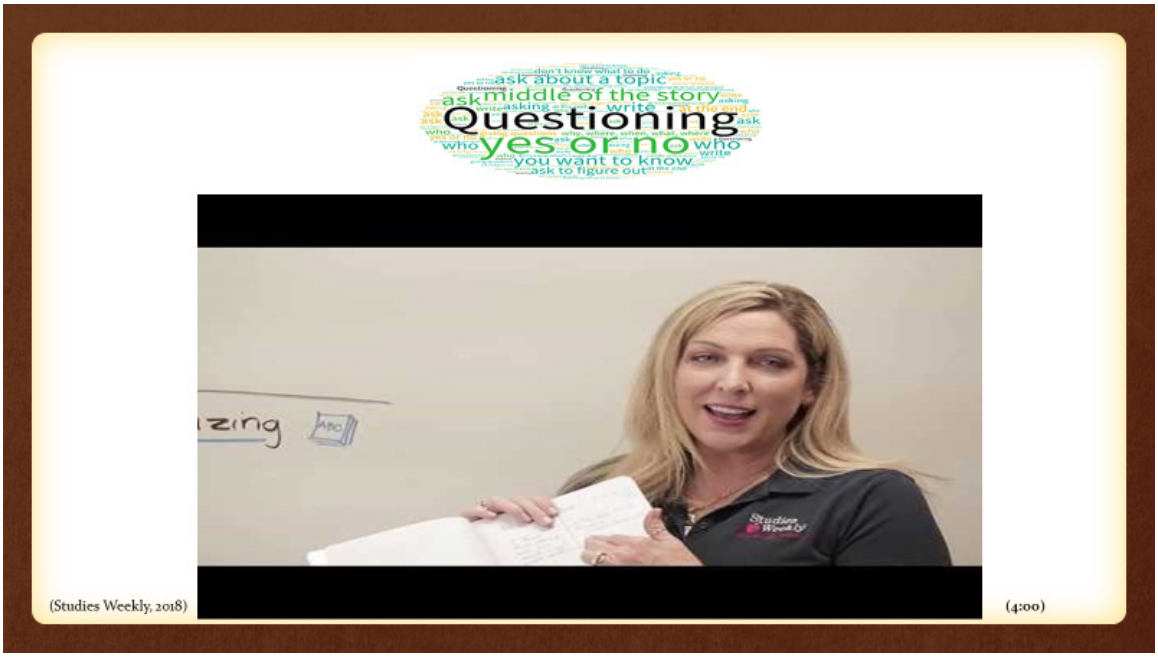

blank
blank
blank
at the beginning
Summarize
you understand it more
break down the story to understand
what the story is about
(Studies Weekly, 2018)
(3:29)


ask about a topic
middle of the story
ask
write
Questioning
yes or no
who
you want to know
ask to figure out
• Readers who ask questions during reading are actively engaged in monitoring their comprehension.
• Readers should ask good questions to test their predictions and clarification of unknown words.
• Readers should ask good questions to identify what is important to remember about text.
• Good questions focus on information in the text.
• Good questions ask who, what, when, where, why, and how.
• Good questions become great questions by formulating higher level questions.
(Ockus, 2010; Missouri Department of Education, 2013)



- Examples of higher level questions might include:
  - ❑ What caused . . . ?
  - ❑ What are the characteristics of . . . ?
  - ❑ What if . . . ?
  - ❑ What does the author mean when . . . ?
  - ❑ Would you agree that . . . ?
  - ❑ Would it be better if . . . ?

(Ockus, 2010; Missouri Department of Education, 2013)



(Studies Weekly, 2018) (4:00)

Session 2 Wrap-Up: Turn and Talk with Partner

- ❑ What is Reciprocal Teaching?
- ❑ What are the benefits of Reciprocal Teaching for students?
- ❑ What are the core components of Reciprocal Teaching?
- ❑ What does the implementation of Reciprocal Teaching look like in a classroom?
- ❑ What are the next steps after today's session?

Session 2 - Post-Assessment

1. Reciprocal Teaching is an instructional practice that **CAN** improve:

   (a) vocabulary (b) reading comprehension (c) reading fluency (d) phonemic awareness

2. Which is **NOT** a component of Reciprocal Teaching?

   (a) summarizing (b) questioning (c) condensing (d) clarifying (e) predicting

3. Please indicate if the following statement is **TRUE** or **FALSE**:

   "Reciprocal Teaching is an instructional practice where the teacher reads passages of text to students as they sit passively at their desks."

4. Which strategy below is **NOT** one of the four foundations used in Reciprocal Teaching?

   (a) Think-Alouds (b) Cooperative Learning (c) Scaffolding (d) Jigsawing

5- Please indicate if the following statement is **TRUE** or **FALSE**:

" The four components of Reciprocal Teaching occur before, during, and after reading the text."

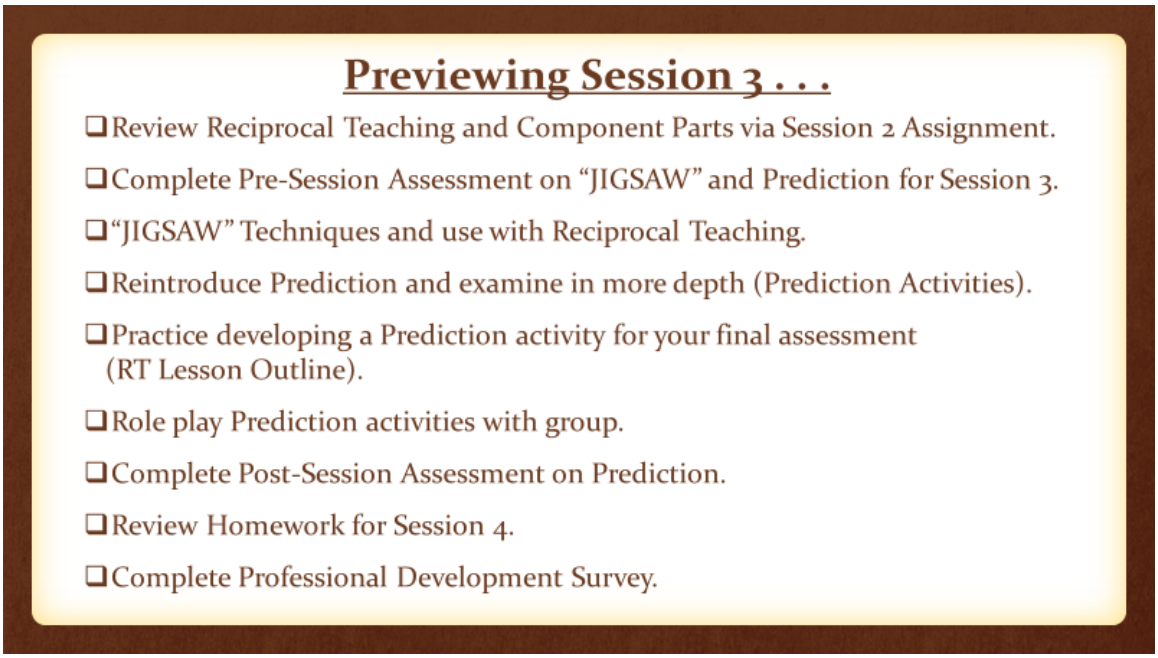
Reciprocal Teaching – 7th Grade Science Class

(Mount St. Mary's College, 2014)

Reciprocal Teaching: 7th Grade Science Class

	What I Saw . . .	What I Do . . .	What I Could Do . . .
Predicting			
Clarifying			
Questioning			
Summarizing			

(Missouri Department of Education, 2014)



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Appendix EE

Suggested Teacher Script – Introducing RT and Four Elements

Introducing Reciprocal Teaching – Day One

Say: What do you think are the strategies that good readers use to comprehend what they read (create list and then segue into goal of today's lesson)?

Say: The goal of today's lesson is to introduce you to a method of reading instruction referred to as "Reciprocal Teaching." There are four strategies that we will be discussing today and then we will work with each individual strategy in more detail this week in order for you to be ready to start using these strategies in groups of four and individually while reading selection of text. Today, I am going to ask you to follow along with me while I model the use of these strategies with you. The four strategies are (a) *Predicting* (b) *Questioning*, (c) *Clarifying*, and (d) *Summarizing*. Each strategy is designed to help you make sense of what the author is communicating to you. Please open your books to page … (select a passage that makes sense based on where you are in the curriculum).

Say: Predicting helps us start to think about what the text is about using headings, sub-headings, pictures, graphs, and other available information. As I look at that this section of text I see the headings (fill in heading), subheadings (fill in subheadings), pictures, graphs, and maps (whichever is applicable) that help me predict what this text might be trying to communicate… (share your predictions with the class and why you made that prediction). What types of predictions can you make using the process that I did? Write your thoughts down and we will talk about it in two minutes (then have students share and write them down somewhere in the classroom for reference during the mini-lesson on predicting).

Say: Once we have made predictions, of course, we will have questions! We are looking to create questions about the main ideas of the text, important details, and inferences from the text. I am going to start reading and stop when I have a question (start reading and stop periodically to formulate questions using *who, what, where, when, why, how, and what if*). Now take two minutes and write down questions you might have regarding the text following the same format as me (encourage students to create questions that start with *who, what, where, when, why, how, and what if* and write them down next to the predictions for use during the mini-lesson on questioning).

Say: We have made *predictions*, we have asked *questions*, now, let's clarify parts of the text that are unclear to us. Clarifying helps you monitor how well you are understanding what you are reading. Sometimes when we read, we find words that we don't recognize, sentences that are confusing to us, or how paragraphs go together. As I read, I am going to stop and make statements to you about what I need clarified (statements might be I didn't understand, this isn't clear, I can't figure out, This word or phrase is confusing . . .). Now what might I do to help gain clarification (model rereading, find clues, connect to prior knowledge, ask a friend)? Identify some words or ideas that you need clarification on and write those down (write these down next to the questions for use during the mini-lesson on

clarification).

Say: Finally, we end with summarizing what we have read. Summarizing can be difficult as we are trying to capture the main ideas of what we have read and arrange them in the correct order. I am going to reread the section of text that we have been working with today and model summarizing for you (stop after each paragraph and address things such as the main idea of each paragraph and any pertinent people, places, concepts, or ideas related to the main idea. Have students do the same after you. Collect these summaries for use later in the week during the summarizing mini-lesson.)

Say: Okay, now before we leave, you have homework. I want you to write down the four parts of Reciprocal Teaching and explain how each part works when reading text (this serves as the assessment for today's activity).

Predicting – Day 2

Students share their conception of prediction. Students will take their predictions from the day before and share them in groups of four. Ask students to identify similarities and differences in the predictions that were made and any evidence that was used to make the predictions. Students will read the text again and verify the accuracy of each prediction made in the previous class.

Assessment: Students should pass in their predictions at the end of class for evaluation.

Criteria: Logical predictions with evidence from the text.

Questioning – Day 3

Students share their conception of questioning. Students will take their questions made at the start of the week and share them in groups of four. Students will reread the text and answer the questions independently, and if they struggle, they can ask a group member.

Assessment: Students should pass in their questions and answers at the end of class for evaluation.

Criteria: Are the questions about the main ideas of the text, important details, and/or inferences from the text?

Clarifying – Day 4

Students share their conceptions of clarifying. Students will take their list of clarifying questions made at the start of the week and share them in groups of four. Students will reread the text and answer the clarification questions independently, and if they struggle, they can ask a group member.

Assessment: Students should pass in their clarifying statements and answers at the end of class for evaluation.

Criteria: Are students using different clarifying strategies to answer their questions.

Summarizing – Day 5

Students share their summaries composed at the start of the week in groups of four. They will break the summary into parts – beginning, middle, and end. Students will agree on one summation of the text and share it with the class. The entire class will compare their group summaries. The assessment pieces here are if students can construct their own summaries with appropriate details in a logical order. Students can identify which summary is best and why. Collect students' individual summaries for evaluation.

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"The focus of my life begins at home with family, loved ones, and friends. I want to use my resources to create a secure environment that fosters love, learning, laughter, and mutual success. I will protect and value integrity. I will quickly admit and correct my mistakes. I will be a self-starter. I will be a caring person. I will be a good listener with an open mind. I will continue to grow and learn. I will facilitate and celebrate the success of others." – Merlin Olson

Education

Johns Hopkins University – Baltimore, MD
Doctor of Education – 21st Century Education **2020**
Dissertation: "*Reciprocal Teaching in the Secondary Social Studies Classroom*"

American International College – Springfield, MA
Certificate of Advanced Graduate Study – Educational Leadership **2009**
Thesis: *"Reading and Math Achievement: Analysis of Half-Day versus Full-Day Kindergarten"*

University of Connecticut – Storrs, CT
Master of Arts – Curriculum and Instruction **2001**
Concentration: Gifted and Talented Education (PK-12)

Assumption College – Worcester, MA
Bachelor of Arts – Liberal Arts, Psychology, Secondary Education **1997**
Concentration: Education (5-12)

Administrative Experience

Auburn High School – Auburn, MA
Principal **2005 - Present**
Principal teacher and head of educational and physical plant operations to include faculty and student growth and development, curriculum design and implementation, student services support (health, guidance, special education), facility and safety management, direct oversight of approximately 750 students, 100 teachers and staff, and APS Leadership Team member with direct knowledge and understanding of Central Office operations.

Wachusett Regional High School – Holden, MA
Assistant Principal **2001 - 2005**
Assistant to the building principal in the capacity of Class Administrator for the Class of 2005 to include disciplinarian of approximately 500 students, assisted with scheduling of school, served as Special Education Team Chair, oversaw Summer School for grades 8-12,

acted as liaison for MCAS remediation, Advanced Placement coordinator, Volunteered to be Student Council Co-Advisor, assisted with programmatic and physical plant alterations as part of addition/renovation project, NEASC Community Outreach Chair, Instructor in Wingspan Academy for elementary grades.

TEACHING EXPERIENCE

Assumption College – Worcester, MA
Adjunct Professor of Education 2002-Present
Courses - "Foundations of Education" and "Educational Psychology"

Nichols College – Dudley, MA 2002-2004
Adjunct Professor of Education
Courses - "Development of Curriculum and Instruction

Wachusett Regional High School – Holden, MA 1997-2001
Department of Social Studies
Courses - "World History," "World Cultures," and "American Government"

HIGHLIGHTED ACCOMPLISHMENTS

Worked with Business Manager and committee to create fiscal policies for Auburn Public Schools (2005)

Oversaw completion and opening of new Auburn High School with School Buildings Committee (2005-2007)

Assist with annual district budget creation and presentation to Town of Auburn (2005-Present)

Successfully helped pass $800,000 override for the Auburn Public Schools (2006)

Led Auburn High School through successful accreditation visit leading to erasure of "Probationary Status" (2007)

Served as Interim Superintendent of Schools at request of Auburn School Committee (Spring/Summer 2007)

Co-chaired Superintendent Search Committee (2008)

Contributing member of Auburn Public Schools Strategic Plan Committee (2008; 2013; 2018)

Regular contributor to Auburn News as part of "Rockets Review," District Quarterly Newsletter, and Town of Auburn Annual Report (2008 – Present)

Recognized by Massachusetts Business Alliance for Education (MBAE) and Teachers 21 as Top 25 Progressive High Schools in Massachusetts (2009)

Contributed and presented research regarding the merits of Full-Day Kindergarten as part of Full-Day Kindergarten Committee's desire to place whole day kindergarten into operating budget (2009)

Partnered with Boston College do study bullying in secondary schools and how to improve school climate (2011)

Delivered school remarks to Moody's Bond Rating Service as part of the Town of Auburn's presentation to be granted higher bond rating in anticipation of securing financing for new middle school (2011)

Member of the Auburn Public Schools Master School Building Committee (2011-2013)

Recognized as school of distinction for lowering achievement gaps of students by Massachusetts Department of Education (2014)

Secured grant funding for 21st Century Skills Academy and Social Studies Curriculum Realignment (2014; 2019)

Participated in building walk-throughs to calibrate high quality instructional and evaluative practices (2016-2019)

Recognized twice as one of "America's Best High Schools" by *US News and World Report* (2016; 2019)

Awarded full-accreditation status by the *New England Association of Schools and Colleges* (NEASC; 2018)

Co-chaired School Start Time Committee (2019)

Unified Champion School and National School of Distinction for inclusive Athletics (2018; 2019)

Recognized as a "Top 5000 STEM High School" by *Newsweek Magazine* (2020)

CURRENT LICENSURE

Massachusetts Department of Elementary and Secondary Education Certificate - #342702
Superintendent / Assistant Superintendent (Initial)
Principal, 9 - 12 (Professional), Principal, 5 - 8 (Initial), Principal, PK - 6 (Initial)
Social Studies, 9 - 12 (Professional), Social Studies, 5 - 9 (Professional)
Sheltered English Immersion Endorsement - Administrator